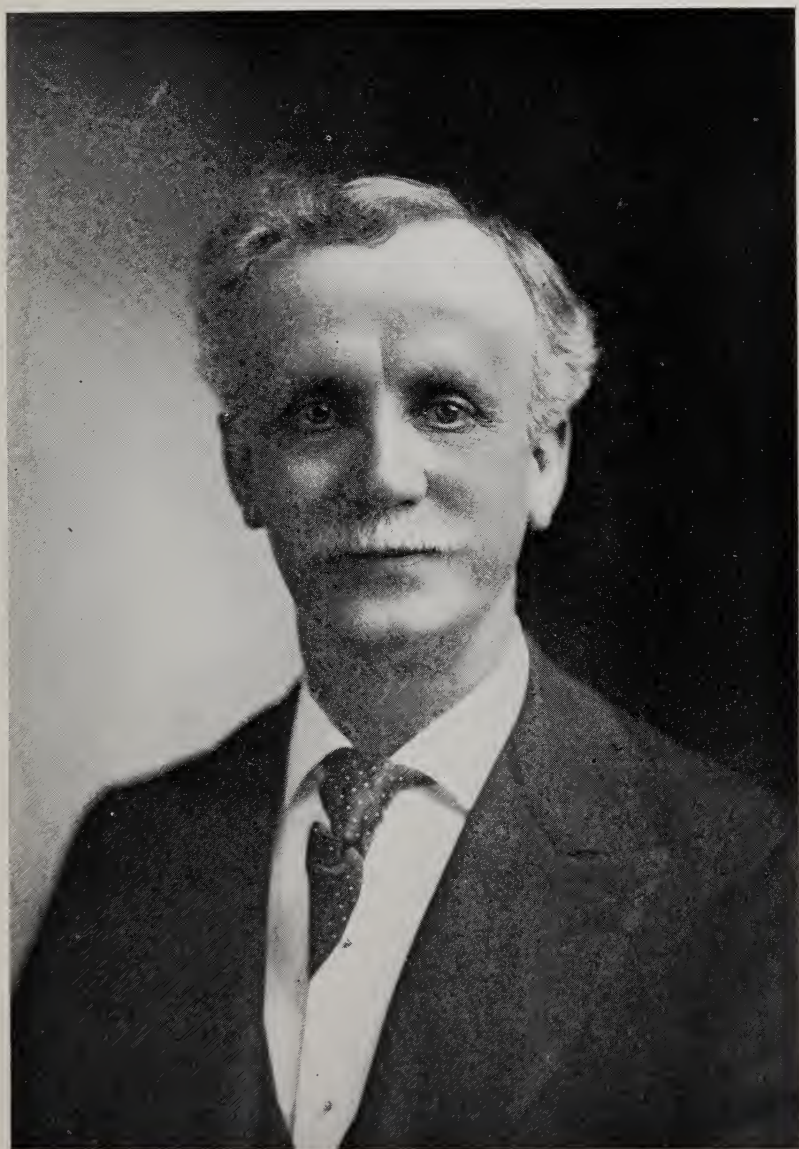


W. R. Lavender

City Treasurer



John Lograbee

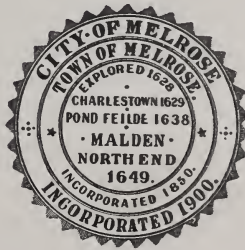


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CITY OF MELROSE, MASSACHUSETTS.

Annual Reports, *1901,*

WITH MAYOR'S INAUGURAL ADDRESS
DELIVERED JANUARY 6, 1902.



PUBLISHED BY ORDER OF THE BOARD OF ALDERMEN, UNDER
THE DIRECTION OF THE CITY CLERK.

MELROSE:

A. W. DUNTON & CO., PRINTERS, REPORTER OFFICE.
1902.

INAUGURAL ADDRESS

OF

HON. JOHN LARRABEE,

MAYOR OF MELROSE,

DELIVERED JAN. 6TH, 1902.

Mr. President and Gentlemen of the Board of Aldermen:

By the will of the people, as expressed at the polls, we meet today to organize the city government for 1902.

In assuming our positions we have each promised to discharge all the duties imposed upon us faithfully, to the best of our several abilities, and for the interest and welfare of the people whose servants we are. May we keep constantly in mind these obligations, and approach the consideration of the problems which will confront us, in a right spirit, with no selfish aims, but with an earnest, sincere desire to solve them in such a manner as will result in the best possible good to all, and reflect lasting credit and honor upon our city.

Following a universal custom, it is my privilege to present to you matters deemed of importance, with such information and suggestions as in my judgment will be of assistance in their consideration.

Before doing so, permit me to express publicly my deep sense of gratitude to the people who by almost unanimous consent have placed me in this and other positions of trust and responsibility.

Born in the town when it was but a village, identified with its growth, having rendered nearly twenty-nine years of service in public office, I appreciate fully the honors so generously bestowed.

I desire also to express my appreciation of the courtesies extended and the support given me by the out-going Board of Aldermen. I have at all times felt, whenever we have differed on public matters, that they had the best interests of the city at heart and were willing to accord to the Executive the same desire to promote its welfare.

FINANCES.

The financial year ends Jan. 31, 1902, and you will have reports in detail from the Auditor and Treasurer at that time.

I present a statement of the city debt as taken from the books of the Treasurer, December 31, 1901.

Funded Debt.

Bonds:

Water bonds,	.	.	.	.	\$237,000 00	
Sewer bonds,	.	.	.	.	350,000 00	
School bonds,	.	.	.	.	200,000 00	
Town Hall bonds,	.	.	.	.	45,000 00	
						\$832,000 00

The Sinking Funds to be applied to the payment of the above at maturity were on Dec. 31, 1901, as follows:

Water,	.	.	.	.	.	\$33,563 87	
Sewer,	.	.	.	.	.	88,253 46	
School,	.	.	.	.	.	13,366 73	
							\$135,184 06

To which will be added before the close of the financial year the sum of \$5,000.00, raised in the tax levy of 1901 for the School Sinking Fund, making a total of \$140,184.06.

Permanent Debt.

Borrowed on account of:

Central Fire Station,	\$10,000 00	
Public Grounds,	10,000 00	
Stone Crusher,	8,000 00	
Ell Pond Park,	13,000 00	
Surface Drainage,	10,000 00	
		\$51,000 00

This debt has been increased during the past year \$10,000.00 for surface drainage, and reduced by the payment of note on Park Loan, \$1,000.00, and also temporarily reduced by the payment of two notes amounting to \$19,000.00, which were borrowed on account of the Central Fire Station \$10,000.00, and for School Improvements, \$9,000.00, which matured during the year; the Treasurer has been authorized to replace these notes, which when carried into effect will make the total permanent debt \$70,000.00.

The temporary loans in anticipation of taxes uncollected are \$103,121.65 and the taxes uncollected amount to \$125,843.69.

There has been borrowed, for not exceeding one year, which must be included in the tax levy of 1902, termed as Municipal Loans, the following:

Highways, maintenance and repairs,	\$5,000 00	
Park Street, paving gutters,	500 00	
City Hall Improvement,	5,500 00	
General Contingent,	2,000 00	
Sidewalks, for repairs,	\$500 00	
For continuous walks,	500 00	
For individual walks,	1,000 00	
		\$2,000 00
		\$15,000 00

Loans have been authorized but not borrowed, which will also be included in the tax levy for 1902, as follows:

For collection of ashes,	\$700 00	
Sidewalks,	800 00	
Amounts carried forward,	\$1,500 00	\$15,000 00

Amounts brought forward,	\$1,500 00	\$15,000 00
Ell Pond Park,	1,213 43	
School Department,	2,450 00	
Health,	409 70	
Street Lighting,	1,025 00	
Soldiers' Monument,	750 00	
Dell Avenue Drain,	750 00	
		\$8,098 13
Total,		\$23,098 13

It was not deemed necessary to borrow the \$15,000.00 authorized for the extension of the sewers, which was to be refunded from the sewer assessments, the amounts paid in during the year being sufficient to meet bills as presented.

The laws limiting the indebtedness of cities to $2\frac{1}{2}\%$ of the assessed valuation for the preceding three years will apply to this city, after January 1, 1905, and should be borne in mind.

I am strongly in favor of the pay as you go policy and opposed to any increase in our permanent indebtedness, unless it be for necessary improvements of a permanent character which will benefit not only this but future generations, who will be obliged to assume the greater part of the debt.

Briefly stated the city debt was on Dec. 31, 1901:

Permanent Debt.

Bonds,	\$832,000 00	
Loans,	51,000 00	
		\$883,000 00
Municipal loans (payable 1902),		15,000 00
Temporary loans in anticipation of taxes,		103,121 65
Trust Funds:		
Cemetery,	\$7,427 50	
E. Toothaker,	1,346 61	
		\$8,774 11
		\$1,009,895 76

ASSETS.

Uncollected taxes,	\$125,843 69	
Due from State,	2,713 23	
Sinking Funds,	135,184 06	
Cash on hand,	8,880 22	
Tax titles uncollected,	3,872 96	
Sewer assessments uncollected,	71,476 69	
Street Sprinkling assessments uncollected,	4,242 49	
Sidewalk assessments uncollected,	1,826 74	
Water rates uncollected (for meter last quarter),	900 00	
		\$354,940 08
Net debt more than assets available,		654,955 68
		\$1,009,895 76

PUBLIC WORKS DEPARTMENT.

Upon the successful maintenance and support of these branches of public service largely depends the attractiveness of a city as a place of residence, and the comfort of its people.

Good roads insure safety and convenience to travelers in vehicles of whatever kind, for business or pleasure, while good sidewalks are indispensable to those who travel on foot.

A never failing supply of pure water and a perfect system of sewers are equally desirable and of greater importance, as they effect the health of the entire community.

Highway Division.

The needs of this division which I desire to recommend for your consideration, are the purchase of a common yard for the storage of teams and water-carts, tools, machinery and implements, steam roller, and to include sewer and water pipes; the erection of a city stable; and the purchase of a portable stone crusher.

The need of a common yard and stable connected has been presented to your Board, details are therefore unneces-

sary, as you have all the facts and figures pertaining to the matter. We are paying annually a large sum for the use of land and buildings, owned by private parties in different sections of the city; widely separated there cannot be the supervision and economical management that would be possible if the city owned and controlled one place in a central location.

The main object in the consolidation of the highway, sewer and water departments into a Department of Public Works was to secure economy and efficiency in the administration. The lack of a common yard and city stable is a hindrance to its full consummation.

Portable Crusher.

In the re-grading of many of our streets a large quantity of material suitable for crushing is obtained. In many instances it would be sufficient, when crushed, to macadamize the roadway from which it is taken, but the distance to the crusher, and the consequent expense of teaming to and from, is so great as to prohibit its use, and it is therefore wasted; if the city owned a portable crusher it could be taken to the street being repaired, the stone crushed and used and the expense of teaming a long distance saved. The acquirement of a portable crusher would be particularly advantageous to the city in the repair of streets at the Highlands, which abound in ledges, the average distance from the present crusher to this district being about $1\frac{1}{2}$ miles.

Sewer Division.

There is little to recommend or call to your attention relating to the sewers. The Commonwealth has recently completed the construction of a main trunk line running from Malden entirely through Melrose to the Wakefield line, and have taken our main sewer into it at Wyoming Avenue, thereby giving relief to the over crowded condition which existed at the junction of Pleasant Street and Wyoming Avenue.

Of the 7,143 feet of sewers ordered built by your Board, 5,300 feet have been laid. The contractor had trouble to

procure workmen, otherwise all would have been completed. There is every indication that the amount appropriated is ample to complete the work. There will probably be no large demand for extensions the coming year as most of the city is well provided. There are now in operation 32.7 miles of sewers, with which are connected 2,030 buildings; along the line of the sewers there are about 500 buildings not connected.

The total net assessment levied to date is \$168,257.04, of which \$96,780.35 has been collected.

Water Division.

The Water Division is in an excellent financial condition, with a prospect of continued improvement.

The total bonded water debt is \$237,000.00; there is in the hands of the Sinking Fund Commissioners \$33,563.87, leaving a net debt of \$203,436.13. We have a claim against the Commonwealth, which when collected will materially reduce this amount, the facts concerning which and the recent tender in settlement are known to your Board. The first bonds due are \$37,000.00 in 1905; the next issue due will be \$50,000.00, in May 1907.

The absolute necessary annual expenses of this division are as follows:

Metropolitan assessment,	.	.	.	.	\$13,000 00
Maintenance,	.	.	.	.	7,000 00
Interest,	.	.	.	.	9,480 00
Total,	.	.	.	.	\$29,480 00

The collections for water rates amount to about \$47,000.00, so it will be seen that there is a surplus, provided no extensions or renewals are paid for out of the receipts, of about \$17,000.00 or \$18,000.00.

In the past four years all of the expense of construction has been paid from the receipts. The amounts are as follows:

1898,	.	.	.	.	.	.	\$13,065	80
1899,	.	.	.	.	.	.	3,812	33
1900,	.	.	.	.	.	.	3,550	00
								\$20,428 13

For 1901 the amount has not been determined.

This expense should not be paid from the water rates but should be provided for by bond issue. The needs of this division to which I particularly call your attention are an improvement in the distribution and the replacing of cement lined pipe with cast iron pipe. Frequent complaints are received from residents of the elevated districts that they are unable to obtain water. At present the main pipe extends through the center of the city, which also happens to be the lowest section, leaving the hills on the extreme end of the pipes, and consequently reducing the pressure, both on account of their elevation and their remoteness from their main supply. Such a condition should not exist, especially when our fire department depends largely on the pressure of the water through hose attached to hydrants, without the added force given by the steamer. To remedy this, and to better distribute the pressure throughout the city, a main supply pipe of at least 12 inches in diameter should encircle the city, which would furnish a direct supply to all of the hills. The route of this pipe, as laid out by the Engineer and Superintendent of Public Works, is through Cleaveland, Maple, Vinton, Orris and Warren Streets to Franklin Street, through Franklin and Green Streets to Avon Street—all of which has been laid—through Avon, Elm, Linden, Porter, Fletcher, Upham, Sewall and Larrabee Streets and Whitman Avenue to Beech Avenue, through Beech and Linwood Avenues, Lynde and Summer Streets and Wyoming Avenue to the junction of Main Street, making a total distance of 19,347 feet, of which 3,260 feet are already laid, leaving a balance to be laid of 16,037 feet, which is estimated to cost \$1.883 per foot, or a total cost of \$30,268.18. With this new main the present needs would be supplied and it would also furnish an adequate supply in any direction in which the city may grow in the future.

In the low sections of the city where the pressure is 90 lbs., the old cement water pipes, which in many instances have been in use for 30 years, should be replaced with cast iron pipes, principal among them being those in Foster, Maple, Vine, Winthrop, Willow and Upham Streets, Wyoming and Lake Avenues.

There is little encouragement to rebuild or macadamize streets until this work is done, as the frequent breaks in the old cement pipes practically destroy all such work.

SURFACE DRAINAGE.

In compliance with your order the Engineer and Superintendent of Public Works has prepared and reported a system of surface drainage for the city, which has been accepted and adopted.

The sums appropriated last year \$10,639.19 were expended to relieve immediate needs in the several localities, each of which will eventually form a part of this system, viz:

Russell and Adams Street, . . .	\$ 864 53	
Green and Linden Streets, . . .	2,257 89	
Lebanon, Laurel and Gooch Sts., . . .	4,053 56	
Cedar Park and Essex Street, . . .	1,708 83	
West Hill Avenue, . . .	833 05	
Miscellaneous, . . .	921 33	
		\$10,639 19

The solution and settlement of this question is of great importance to the city, greater I believe than any other which you will have presented to you.

We know from experience that the preservation and maintenance of the streets and walks largely depends on proper drainage; that money expended on some streets in the past has been to a large extent wasted by reason of the destructive effect of surface water.

As a health measure its importance cannot be estimated, and from a material standpoint, the relief which could be afforded certain estates by proper drainage, would add to their value, making available for dwellings or business purposes, land which is now unsightly and of but little use, thus adding to the wealth and prosperity of the city.

I would recommend that further appropriations be made for the extension of the system; that the Legislature be petitioned for the passage of a special act that will simplify and make certain the methods to be pursued in all matters relating to the laying out of and the taking of land for such drains; the assessments for betterments, etc., and that action be taken which will result in the lowering of Spot and Ell Pond Brooks.

Intimately connected with the question of surface drainage is the present and future condition of Spot and Ell Pond Brooks, as they are directly and indirectly the natural outlet for the surface water for almost the entire city.

By an act of the Legislature in the year 1869, the County Commissioners of Middlesex County were authorized and directed to take and lay out such land, water courses and water rights, dams, and other real estate or interests or easements or rights therein, on or adjoining the streams or brooks running from Ell pond in Melrose and Spot Pond in Stoneham to the tide-water in Malden, as they shall deem necessary for the purposes of proper drainage and the public health. They were further authorized to control the damming up and letting off the waters of said ponds. They could change, widen, straighten and deepen the channels of said brooks or streams, and remove all dams or other obstructions therefrom, and use and appropriate said brooks or streams in such manner as they deem necessary for the purposes named. The act was accepted by the then towns of Malden and Melrose, hearings were held on the question of removing the obstructions, and the Board determined and ordered that the removal of the dam at Dyer's Mill privilege was necessary for the purposes of proper drainage and the public health. Upon their order and decree the dam was removed by agents appointed, after which they did further adjudge and decree that the streams or brooks should be located and their courses and widths described. This was performed by the agents and their report became a part of the final report of the commissioners. The total expense was apportioned between the towns, Melrose paying \$4,105.55, and they were each required to keep in repair and

maintain that part of the drain within their respective limits.

It is claimed by the Commissioners that their duties and powers ended with their final report. Melrose has continued to maintain and keep in order the brooks within its limits, removing obstructions nearly every year, but has not deepened the channel or widened the brooks as prescribed in the original order.

During this time there has been no improvement, which would benefit this city, within the limits of the city of Malden; to the contrary, by the building of streets and the laying of water and sewer pipes, the brook has been made smaller. Committees have been appointed and conferences held with the Malden authorities in regard to the obstructions, but no real progress toward their removal has resulted.

During the past year the residents along the line of Spot Pond Brook, in the vicinity of Whittier and Cutter Streets, were seriously inconvenienced by surface water. The matter was brought to the attention of the Metropolitan Water Board, by whose authority water from Doleful Pond has been brought into Spot Pond Brook.

While the improvements were in progress at Spot Pond, a pipe was laid from Doleful Pond beneath Spot Pond to its original outlet, and the water-shed or drainage area of about 800 acres, which before run into Spot Pond, is now directed into Doleful Pond, and from thence by pipe into Spot Pond Brook; as a result, the conditions surrounding the brook have entirely changed, the brook is taxed beyond its capacity, and in times of a heavy rainfall, when most needed, overflows its banks and floods the estates adjoining. This increase in volume of water also adds to the difficulties below where the brook unites with Ell Pond Brook.

The State, by its Commissioners, has assumed the right to so use Spot Pond Brook, and should provide the much needed relief, for this section. I am informed that the matter is receiving their serious consideration.

The lowering, deepening, widening and increasing the capacity of these brooks, the removal of all obstructions to

the tide-water in Malden, as provided by the Act of the Legislature and order of the County Commissioners, should also be accomplished, as intended and ordered.

PUBLIC SERVICE CORPORATIONS.

Of these corporations who enjoy special privileges in our highways and streets, we have but four. With the growth of the city the demand for telephones, electric lights and better facilities for travel has increased rapidly, and locations and extensions of lines have been granted until we have a large number of poles, in many instances more than required, provided the companies could, by agreement, unite and use larger poles of uniform size, thereby reducing the number and relieving in some measure the disfigurement of the streets.

A permit was granted the Telephone Company for the laying of conduits for an underground system; so far as known, they are but little used, and the overhead lines are still maintained. The public often complain of the poor service, or lack of service, rendered by these corporations, and as their right to operate is given by the officials of the town or city, representing the people, they naturally expect that the officials will secure for them better and more efficient service to which they are entitled.

The telephone service is not what it should be, owing to the rapid increase in number, and possibly want of main lines.

The electric cars now running to Boston for a five cent fare are appreciated and liberally patronized. There has been an improvement in the cars furnished, and were it not for the inability of the management to run the cars from Boston to Melrose on schedule time, which causes serious inconvenience to patrons going north, and also disarranges the transfers at the Highlands, there would be but little cause for complaint.

With increased facilities for the storage of cars, which are nearly completed, there should be an improvement in the service.

PUBLIC SCHOOLS.

Our public schools and buildings are a source of pride and satisfaction to all the people; in them the child of the humblest or poorest citizen can receive an education which will fit him for entrance to the higher schools and colleges, or to find a place in the business world. That the advantages offered in our High School are appreciated, is shown by the statistics of attendance and by the ratio of enrollment to the total school enrollment, as compared with other cities of the state.

The largest single item of our appropriations is for the support of schools; it is not surprising therefore that it is subject to criticism, often unjust; of this I am certain, the people desire the best schools that can be afforded, and only ask of the committee to whom the funds are entrusted, a wise expenditure and economical management, which shall result in a full equivalent for every dollar expended.

The total average membership of schools for the school year ending June, 1901, was 2,599, showing an increase over previous year of 90. The average membership of the High School during the same time was 265, an increase over previous year of 27. Number of pupils registered in High School, December, 1901, 312, an increase over that of a year ago of 36.

POLICE.

We are a law abiding people, and the sentiment as expressed at the polls is strong in opposition to the sale of intoxicating liquors, which it is generally conceded is the direct cause of most of the crimes which are committed.

The arrests for drunkenness during the year 1901 were 75, an increase over the previous year of 17. In all fairness it should be stated that most of the arrests were made at the railroad stations and from the electric cars returning at late hours from the great city where the license system prevails.

The laws have been well enforced, order preserved, and the officers faithful in the discharge of their duties.

The records show no serious crimes committed; minor offences have kept the officers busy.

FIRE DEPARTMENT.

The Fire Department has demonstrated its efficiency in the past; its members are temperate men, and it is a credit to the city. The hose company and apparatus located for many years at Wyoming was removed during the past year to the central station. The company composed of call men residing at a distance cannot respond as quickly nor render as valuable service as before the removal. If the existing arrangement, whereby the steamer, hook and ladder carriage, and hose company with permanent men from the central station respond to all alarms, is to be continued, the Wyoming company might well be merged into other companies as vacancies occur, and a chemical apparatus with permanent men substituted, which would be of more effective service to the entire city,

PUBLIC HEALTH.

The importance of precautionary measures for the prevention and spread of disease, and the adoption and enforcement of rules and regulations concerning the public health are of vital interest to every community.

The members of our local board have been active and painstaking in the performance of their duties, and their suggestions and recommendations deserve careful consideration. The establishment of a hospital for patients afflicted with contagious diseases can be at any time required by the State Board of Health, under the provisions of Chapter 171, Acts of 1901, which is as follows:

AN ACT to provide for the establishment in cities of hospitals for persons having smallpox or other diseases dangerous to the public health.

Be it enacted, etc., as follows:

Section 1. Every city in the Commonwealth shall establish within its limits and keep itself constantly provided with one or more isolation hospitals for the reception of persons having smallpox or any other disease dangerous to the public health. Such hospitals shall be subject to the orders and regulations of the boards of health of the cities in which they are respectively located.

Section 2. Whenever a city shall refuse or neglect to carry into effect the provisions of section one of this act, after having been requested so to do by the state board of health, it shall be liable to forfeit a sum not exceeding five hundred dollars for each refusal or neglect. (Approved March 21, 1901.)

While we earnestly hope that such a building may never be required, we cannot expect to always escape what other cities have found to be, under certain circumstances, a necessity.

The removal of ashes, under the direction of the Board, has not been an unqualified success, a misunderstanding having existed as to when the contractor should visit the several wards. Sufficient has been accomplished to show the need and the benefits to be derived by the public, if the work is done systematically and promptly.

CHARITY DEPARTMENT.

With the growth of the city the demands upon this department increase. The Board of Overseers have requested an appropriation for the purpose of improving the accommodations at the Pratt Farm, to enable them to furnish better care for sick and aged persons, the facts concerning which have been presented to you.

The Chairman of the Board has devoted much time, thought and study to the discharge of his duties, and the city has profited by his care for its interests and valuable experience. He has also had charge of the disbursement of State and Military Aid, and of the appropriation for the relief of soldiers. The last named has been insufficient the past year, and in preceding years, to meet the demands, which are heavy, and will continue to increase as the veterans, enfeebled by age and disabilities, become unable to longer support themselves.

CITY HALL BUILDING.

Recent repairs upon the outside of the building, and repairs and modern improvements added in the Auditorium,

will contribute to the comfort and convenience of patrons, and cannot fail to be appreciated. The ceilings and walls have been frescoed, woodwork cleaned and varnished, comfortable seats furnished in place of settees removed, and the entire building wired for electric lights. There are other repairs necessary, the most important among them being better sanitary arrangements.

The tramps now accommodated in the basement are a constant menace to the health and well being of all persons who frequent the building.

The prevalence of contagious diseases in cities and towns adjoining has emphasized the necessity of isolating and excluding such persons who travel about the country, and by their filthy condition, invite and scatter germs of disease.

Persons arrested are forced to occupy the same cells, and the number of temporary visitors is often so large that the latter are obliged to find a resting place upon the bare floors. Their removal to some place where they could be better accommodated and compelled to render some return for what they receive, seems desirable for their comfort and the better protection of the public. Such a change need not involve large expense, and will, I trust, receive your favorable consideration. The total number of persons who have been cared for and furnished lodging in the room below during the year is 1460.

ASSESSMENT OF TAXES.

The duties of the assessors are prescribed by Statute, their principal duty being to assess taxes and estimate the value of property for the purpose of taxation; to truly and impartially, according to their best skill and judgment, assess and apportion such taxes, neither over-valuing or under-valuing any property subject to taxation.

Brought into close contact with the people they are subjected to severe criticism; they may, and without doubt often do, err in judgment as to the value of property. It is their duty also to listen to many appeals which move their sympathy, but cannot in justice to the public be granted, which makes their position onerous and difficult.

The office demands persons of business experience, familiar with values, particularly of real estate; added to this should be the ability to wisely discriminate, and the disposition to faithfully administer all the duties which require both time and patience.

To secure the services of such men, the salary should be commensurate with the standard and quality of the work. It is a difficult matter to induce men of business experience to accept the position for the reason they cannot afford to give the time now required.

The charter provides for the appointment of assistant assessors, who by assessing the poll taxes, would greatly relieve the Board, leaving them free to attend to matters of greater importance. As a result the poll taxes would be assessed and collected more promptly, and the delay in the valuation of real estate avoided.

Every facility and modern convenience, whereby the work of the office can be more fully and speedily discharged, is a paying investment and yields returns, not only in the accommodation furnished the public, but many times their adoption brings to light property which might otherwise escape taxation.

The Board has been systematically aided and the city largely benefited by the plans and survey, from the sewer department. There are quite a large number of estates situated outside the lines of sewer and water pipes of which no survey is recorded, accurate knowledge concerning which might yield profitable returns.

The total valuation for the year 1900 was \$12,778,365.00; the year 1901, \$14,890,765.00; an increase of \$2,112,400.00. Without entering into details, this increase was levied largely upon land. No doubt there were many instances where the land had been under-valued, and justice and equity required an adjustment by increasing the value. Land appreciates in value by the demand for its use; on the contrary buildings depreciate in value in the process of time and by use; if increase of value there should be it was rightly placed upon the land.

There has come to my knowledge several instances where

the value of property, particularly in the outskirts of the city, has been largely increased. It cannot be said that there has been an increased demand for such property, or that conditions surrounding it have materially changed, and the owners are now taxed for the support of much, for which no direct benefit is received. I am of the opinion that these valuations should be carefully examined and readjusted during the coming year.

So far as possible fixed rules for the valuation of property should be adopted, so plain and simple that the average citizen could understand them. As often as once in three or five years a list of all valuations should be published.

By Section 54 of the city charter, the provisions of law which limit the tax rate for city purposes, excluding the state, county and other taxes required by law to be raised to \$12.00 on every one thousand dollars of the average of the assessors' valuation of the taxable property in the city for the preceding three years, deducting abatements, will not apply to this city until January 1, 1905. The city tax for the year 1901 was \$14.24, the total rate being \$16.20. As I have indicated, the matter of assessment of property demands the most careful consideration, and involves our future welfare and progress.

A fixed policy adopted would bring us to the conditions required three years hence without detriment or friction.

PUBLIC LIBRARY.

For thirty-one years the public library has steadily grown in usefulness and favor. Its present quarters are the best obtainable, but owing to the increased patronage and size of the library, now numbering about 14,000 volumes, the need of a large and commodious building, devoted exclusively to its use, is urgently felt. The hope that some liberal person or persons of abundant means would recognize our need and embrace the opportunity to benefit this and future generations by their generosity has long been cherished by the board of trustees.

It is my privilege to present for your consideration a letter, recently received from the most liberal giver to public

libraries and institutions of learning in the world ; his benefactions to his native country, and more recently his offers to this his adopted country, of millions for educational purposes, and to the City of New York for the establishment and maintenance of free libraries, are well known to all. I refer to the Hon. Andrew Carnegie of New York City.

[Copy of Letter.]

MAYOR LARRABEE, Melrose, Mass.

Dear Sir :

Responding to your letter : If the City of Melrose will pledge itself by resolution of councils to support free library at cost of not less than twenty-five hundred dollars a year, and provide a suitable site, Mr. Carnegie will be glad to furnish twenty-five thousand dollars for a free library building.

Respectfully yours,

Dec. 31, 1901.

JAS. BERTRAM, Private Secretary.

I sincerely hope that this generous offer will receive your favorable consideration, the pledge of support of the library given, and the gift accepted. That it may also prove an incentive to others to give, and that action shall be taken by the city which will result in the erection of a Public Library Building.

TOWN HISTORY.

By vote of the town at meeting held April 21, 1898, Elbridge H. Goss, Esq., was unanimously chosen to write a history of the Town of Melrose. The work, involving much time and labor, is finished and awaits publication. Of the value of the work there can be no question; undertaken by request, without promise of remuneration to its author, the city should justly authorize its publication and assume the necessary expense.

Gentlemen :

Great responsibilities have been entrusted to us ; we are the chosen representatives of the people ; having responded to their call, they have a right to expect faithful service on our part.

I ask your hearty co-operation, that we may labor together, and wisely administer the affairs of this city.

Government of the City of Melrose.

1901.

MAYOR.

JOHN LARRABEE.

PRESIDENT OF THE BOARD OF ALDERMEN.

JOHN G. ROBINSON.

ALDERMEN-AT-LARGE.

WILLIAM A. CARRIE,	.	.	.	.	.	Term expires Jan. 1903
EUGENE H. MOORE,	.	.	.	.	.	" " " 1903
M. FRANK EASTMAN,	.	.	.	.	.	" " " 1903

CHARLES J. BARTON,	.	.	.	.	.	Term expires Jan. 1902
CHESTER SHEPARD,	.	.	.	.	.	" " " 1902
CLARENCE T. FERNALD,	.	.	.	.	.	" " " 1902
*JONATHAN C. HOWES,	.	.	.	.	.	" " " 1902
†CHARLES W. H. FREDERICK,	.	.	.	.	.	" " " 1902

WARD ALDERMEN.

Ward 1.	ARTHUR H. FOLGER.	CHARLES E. FRENCH.
Ward 2.	ALBERT A. DAY.	GEORGE E. CORNWALL.
Ward 3.	FRANK W. FOSTER.	ELBRIDGE H. GOSS.
Ward 4.	MOSES S. PAGE.	JOHN G. ROBINSON.
Ward 5.	FRED E. EVERETT.	EDWIN S. SMALL.
Ward 6.	CHARLES N. SHUTE.	AARON HILL, JR.
Ward 7.	ANDREW J. BURNETT.	JOHN E. MARSHALL.

CLERK OF THE BOARD.

W. DEHAVEN JONES, City Clerk.

Regular meetings the second and fourth Mondays in each month, at 7.45 o'clock p. m.

*Deceased. †Elected to fill vacancy.

Standing Committees of the Board of Aldermen.

Accounts and Surety Bonds.

Aldermen CARRIE, FRENCH, DAY, BARTON and CORNWALL.

Buildings.

Aldermen FOSTER, HILL, PAGE, BURNETT and MARSHALL.

City Clerk and Cemetery.

Aldermen BURNETT, FOSTER, PAGE, GOSS, *HOWES and FREDERICK.

Claims.

Aldermen CARRIE, BARTON, SMALL, MARSHALL and CORNWALL.

Elections and Returns, Printing and Supplies.

Aldermen EVERETT, FRENCH, SHUTE, EASTMAN and GOSS.

Finance.

Aldermen SMALL, MARSHALL, SHEPARD, HILL, PAGE, GOSS,
*HOWES and FREDERICK.

Fire Department, Electric and Telephone Wires.

Aldermen MOORE, FRENCH, BURNETT, EVERETT and SHUTE.

Highways, Sewers, Water and Public Grounds.

Aldermen FERNALD, EASTMAN, MOORE, FOLGER, FOSTER,
EVERETT and BURNETT.

Nominations and Resolutions.

Aldermen DAY, SHEPARD, FOSTER, PAGE and FERNALD.

Ordinances, Rules, Orders and Legislative Matters.

Aldermen BARTON, SMALL, SHEPARD, CARRIE and THE PRESIDENT.

Police Department and Licenses.

Aldermen BARTON, CARRIE, HILL, DAY and CORNWALL.

Public Charities.

Aldermen MARSHALL, DAY and PAGE.

*Deceased.

STANDING COMMITTEES

Public Health.

Aldermen HILL, FRENCH and SHUTE.

Public Schools and Public Library.

Aldermen FRENCH, SMALL, BARTON, CARRIE and DAY.

Solicitor and Collector.

Aldermen FOLGER, DAY, EVERETT, SHUTE, *HOWES and FREDERICK.

Special Committee on Settlement with Metropolitan Water Board.

Aldermen MOORE, CARRIE, SHEPARD, GOSS and SHUTE.

State and Military Aid, and Soldiers' Relief.

Aldermen DAY, MARSHALL and PAGE.

Street Railways and Public Lighting.

Aldermen SHEPARD, BURNETT, EASTMAN, MOORE and FOLGER.

Treasury and Assessors.

Aldermen PAGE, MARSHALL, FERNALD, EASTMAN,

*HOWE, and FREDERICK.

*Deceased.

CITY OFFICERS.

City Clerk.
W. DEHAVEN JONES.

City Treasurer.
WILLIAM R. LAVENDER.

City Collector.
JAMES W. MURRAY.

City Auditor.
EDWIN C. GOULD.

Engineer and Superintendent of Public Works.
W. DABNEY HUNTER.

Mayor's Clerk.
EMMA L. LEIGHTON.

City Solicitor.
FRANK L. WASHBURN.

Chief of Fire Department.
A. WILBUR LYNDE.

Chief of Police.
FRANK M. McLAUGHLIN.

Inspector of Buildings.
W. AUGUSTUS GOODNO.

Inspector of Plumbing.
JOHN T. BARKER.

Inspector of Milk and Vinegar.
WILLIAM S. BRIRY.

Inspector of Animals, Provisions and Food Products.
*FRANK P. STURGES. †WILLIAM H. DOLE.

Sealer of Weights and Measures.
WILLIAM L. PIERCE.

Agent State and Military Aid and Soldiers' Relief.
SIDNEY H. BUTTRICK.

Burial Agents.
FRANK T. PALMER.

GEORGE P. MARSH.

Assessors.
WILLIAM MORSS. FRANK R. UPHAM, Chairman. WALTER C. STEVENS.
*Resigned. †Appointed to fill vacancy.

CITY OFFICERS

Board of Health.

PAUL H. PROVANDIE, Chairman.
JOSEPH H. ROBINSON.

†JOHN T. TIMLIN.
*WILLIAM H. DOLF.

Overseers of the Poor.

SIDNEY H. BUTTRICK, Chairman.
ALBERT B. FRANKLIN. MATILDA E. STANTIAL.

Matron Pratt Farm.

MRS. CHRISTIE CHANDLER.

School Committee.

FRED L. WOOD,	.	.	.	.	.	.	Term expires 1904
EDWARD B. MARSH,	.	.	.	.	.	.	" " 1904
BESSIE B. DEARBORN,	.	.	.	.	.	.	" " 1904
A. F. AMADON,	.	.	.	.	.	.	" " 1903
SUSAN F. FLANDERS,	.	.	.	.	.	.	" " 1903
GEORGE H. HILL,	.	.	.	.	.	.	" " 1903
WILLIAM D. STEWART,	.	.	.	.	.	.	" " 1902
DON E. CURTIS,	.	.	.	.	.	.	" " 1902
SARAH A. DAY,	.	.	.	.	.	.	" " 1902

WILLIAM D. STEWARD, Chairman. A. F. AMADON, M. D., Secretary.

Sinking Fund Commissioners.

JOHN W. FARWELL,	.	.	.	.	.	.	Term expires 1905
DANIEL RUSSELL,	.	.	.	.	.	.	" " 1904
ROYAL P. BARRY,	.	.	.	.	.	.	" " 1903

Trustees of the Public Library.

MARIA L. CHAPIN,	.	.	.	.	.	.	Term expires 1904
NEIL A. DIVVER,	.	.	.	.	.	.	" " 1904
CHARLES C. BARRY,	.	.	.	.	.	.	" " 1903
EDWARD M. MUNYAN,	.	.	.	.	.	.	" " 1903
CHARLES A. PATCH,	.	.	.	.	.	.	" " 1902
MARY L. CHARLES,	.	.	.	.	.	.	" " 1902

Cemetery Committee.

JOHN P. DEERING, Chairman. LEWIS HENRY KUNHARDT.
OSCAR F. FROST. EDWIN C. GOULD, Clerk.
ROSCOE A. LEAVITT, Superintendent of the Cemetery.

Registrars of Voters.

EDWIN L. CRAGIN,	.	.	.	.	.	.	Term expires 1904
HERBERT A. MARSH,	.	.	.	.	.	.	" " 1903
VICTOR C. KIRMES, Chairman,	.	.	.	.	.	.	" " 1902

W. DEHAVEN JONES, City Clerk, ex officio.

Engineers of the Fire Department.

A. WILBUR LYNDE, Chief.
JOSEPH M. HOLBROOK. SAMUEL LEAR, Clerk.
*Resigned. †Appointed to fill vacancy.

Measurers of Wood and Bark, Weighers of Hay and Coal.

SETH E. BENSON.	GEORGE GOODWIN.	CHARLES B. GOSS.
FRED H. GOSS.	FRANK E. NEWELL.	CHARLES L. WALKER.
OTIS W. PIERCE.	WILLIAM L. PIERCE.	GEORGE M. HALL.

Fence Viewer.

WALTER C. STEVENS.

Field Driver.

H. W. CHANDLER.

Pound Keeper.

H. W. CHANDLER.

Police Officers.

PERMANENT FORCE.

FRANK M. McLAUGHLIN, Chief.	GEORGE E. FULLER.
OSBORN E. DROWN.	HARRY BROWN.
WILLIAM A. CASWELL.	ALLSTON H. PINEO.
REDFORD M. RAND.	WILLIAM H. DOHERTY.
WILLIAM C. MCCARTHY.	CHRISTOPHER B. THOMPSON.
LOUIS B. HEATON.	FRANK N. PIERCE.

SPECIAL OFFICERS.

CHARLES J. WING.	ELVIN C. SLOCUMB.
JAMES H. MAINE.	PATRICK F. MURRAY.
JOHN J. HINDS.	FRANK N. PIERCE.
A. WILBUR LYNDEN.	MICHAEL J. HANLEY.
EDGAR E. SHERBURNE.	JEROME T. SMITH.

ARTHUR L. BRIGHAM.

CONSTABLES.

GEORGE W. BURKE.	FRANK M. McLAUGHLIN.
WILLIAM L. PIERCE.	OSBORN E. DROWN.

Bail Commissioner.

SIDNEY H. BUTTRICK.

ELECTION OFFICERS.

Ward 1.

CHARLES N. FOWLER, Warden.	NATHAN WEBSTER, Deputy Warden.
CORYDON W. HARLOW, Clerk.	JOHN W. NOWELL, Dept. Clerk.
D. FRANK STEARNS, Inspector.	GEORGE B. MUNN, Dept. Inspector.
WILLIAM H. GREENLEAF, Inspector.	SIMEON CRAGIN, JR., Dept. Inspector.
CHARLES F. GOURLEY, Inspector.	JOHN H. ADDISON, Dept. Inspector.
MICHAEL D. REARDON, Inspector.	ROBT. H. CURRY, Dept. Inspector.

Ward 2.

ORANGE H. COOK, Warden.	CALVIN W. SAWYER, Dept. Warden.
AUBREY W. DUNTON, Clerk.	SAMUEL LEAR, Dept. Clerk.
FRANK E. MORTON, Inspector.	ALDEN B. SMITH, Dept. Inspector.
GEORGE C. BUCKNAM, Inspector.	NEIL A. DIVVER, Dept. Inspector.
GEORGE W. BURKE, Inspector.	JAMES L. RILEY, Dept. Inspector.
FRANK L. TERWILLEGER, Inspector.	GEORGE W. STINSON, Dept. Inspector.

Ward 3.

FRANK TOWLE, Warden.	F. P. BOWDEN, Dept. Warden.
OTIS W. PIERCE, Clerk.	CHARLES H. KING, Dept. Clerk.
PETER J. CURRAN, Inspector.	EVERETT E. TARBOX, Dept. Inspector.
GEORGE F. WOODMAN, Inspector.	GEORGE W. VANHORN, Dept. Inspector.
JOHN J. KEATING, Inspector.	CHASE C. WORTHEN, Dept. Inspector.
STEPHEN A. LOVEJOY, Inspector.	MILO N. ROBBINS, Dept. Inspector.

Ward 4.

GEORGE E. BABSON, Warden.	WALTER H. FLANDERS, Dept. Warden.
CLARENCE P. HOLDEN, Clerk.	GEORGE E. HYDE, Dept. Clerk.
FRANK A. FERNALD, Inspector.	CHARLES H. BUTTRICK, Dep. Insp.
CURTIS S. GORDON, "	CHAS. GARDNER BARRY, Dept. Insp.
WILLIAM P. LIBBY, "	H. RUSSELL SAWTELL, " "
WILLIAM E. WATERHOUSE, Insp.	EDWARD E. BABB, " "

Ward 5.

FRANK H. MERRILL, JR., Warden.	JOHN M. HAMLIN, Dept. Warden.
GEORGE H. DEARBORN, Clerk.	JAMES P. SIMPSON, Dept. Clerk.
OTIS K. PHINNEY, Inspector.	SAMUEL DEARBORN, Dept. Inspector.
THOMAS J. HAWKES, "	FRANCIS H. MERRILL, JR., Dept. Insp.
FRED L. PUTNAM, "	MERTON G. WOODBURY, " "
JOHN KEEFE, "	GEORGE B. CRANE, " "

Ward 6.

MELVILLE D. VAUGHN, Warden.	E. W. LEWIS, Dept. Warden.
PETER J. LYNCH, Clerk.	WILLIAM J. DUFFY, Dept. Clerk.
HARRY M. EASTMAN, Inspector.	WILLIAM F. RUSSELL, Dept. Insp.
STEPHEN C. DEERING, "	JONATHAN H. ATKINSON, Dept. Insp.
GEORGE H. TOWNE, "	J. SYDNEY HITCHINS, " "
THOMAS D. BAYNE, "	GEORGE B. GROTTENDICK, " "

Ward 7.

GEORGE A. BAILEY, Warden.	ALBERT E. DADLEY, Dept. Warden.
JOHN J. McCULLOUGH, Clerk.	JOHN J. BUCKLEY, Dept. Clerk.
W. A. T. NORRIS, Inspector.	HERBERT H. SLOCUM, Dept. Insp.
WILLIAM CORNER, "	JOHN C. FLATLEY, " "
FRANK N. LOVELAND, Inspector.	JAMES R. DONAHER, " "
CHARLES F. DOHERTY, "	EDMUND FAHY, " "

ANNUAL REPORT

OF THE

SCHOOL COMMITTEE

OF THE

CITY OF MELROSE

FOR THE

YEAR ENDING JANUARY 31, 1902.

MELROSE, MASS.:

A. W. DUNTON & CO., PRINTERS, REPORTER OFFICE.

1902.

SCHOOL CALENDAR FOR 1902.

Dates in Italics are Vacations and Holidays.

January.							February.							March.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	1	2	3	4	..	..	..	..	..	..	1	..	..	..	..	..	..	1
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31	..	23	24	25	26	27	28	..	23	24	25	26	27	28	29
..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	..	..	..	..	..

April.							May.							June.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	1	2	3	4	5	..	..	..	..	1	2	3	1	2	3	4	5	6	7
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
27	28	29	30	..	..	..	25	26	27	28	29	30	31	29	30	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

July.							August.							September.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	1	2	3	4	5	..	..	..	..	..	1	2	..	1	2	3	4	5	6
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
27	28	29	30	31	..	..	24	25	26	27	28	29	30	28	29	30	..	..	..	..
..	..	..	..	..	..	..	31	..	..	..	..	..	..	..	..	..	..	..	..	..

October.							November.							December.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	1	2	3	4	..	..	..	..	..	..	1	..	1	2	3	4	5	6
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
26	27	28	29	30	31	..	23	24	25	26	27	28	29	28	29	30	31	..	..	..

SCHOOL COMMITTEE FOR 1901.

MEMBERS.

Fred L. Wood, 89 East Foster street,.....	Term expires 1904
Edward B. Marsh, 15 Cass street,.....	“ “ 1904
Bessie B. Dearborn, 315 Main street,.....	“ “ 1904
A. F. Amadon, M. D., 9 Vine street,	“ “ 1903
Susan F. Flanders, 22 Hillside avenue,	“ “ 1903
George H. Hill, 16 Summer street,.....	“ “ 1903
William D. Stewart, 21 Woodland avenue,.....	“ “ 1902
Don E. Curtis, 129 Bellevue avenue,	“ “ 1902
Sarah A. Day, 45 Ashland street,.....	“ “ 1902

ORGANIZATION OF COMMITTEE.

William D. Stewart, Chairman.

A. F. Amadon, M. D., Secretary.

MEETINGS OF COMMITTEE.

Regular meetings of the School Committee are held in the Committee Room, High School Building, on the second and fourth Tuesdays of every month, except July and August, at 8 o'clock p. m.

SUPERINTENDENT OF SCHOOLS.

FRED H. NICKERSON, A. M., 492 Lebanon street.

Office : High School Building.

Office Hours : 8 to 9 a. m., on all school days, and 4 to 5 p. m. on Monday, Tuesday, Thursday and Friday.

Telephone : 153-2 Melrose.

Superintendent's Clerk : Helen L. Burr, 119 Wyoming avenue.

SUB-COMMITTEES.

Accounts, Finance and Estimates.

Mr. Curtis,	Mr. Hill,	Mrs. Flanders.
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Courses of Study and Text-Books.

Mrs. Dearborn,	Mr. Marsh,	Mr. Hill.
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Supplies and Printing.

Mr. Wood,	Mr. Hill,	Mrs. Flanders.
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Special Studies.

Mrs. Dearborn,	Mrs. Day,	Mr. Curtis.
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Rules and Regulations.

Mr. Marsh,	Mr. Wood,	Mrs. Day.
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School Houses and Janitors.

Dr. Amadon,	Mr. Hill,	Mr. Marsh.
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Teachers and Salaries.

Mrs. Day,	Dr. Amadon,	Mr. Wood.
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Kindergarten.

Mr. Hill,	Mrs. Dearborn,	Mr. Marsh.
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High School.

Mrs. Flanders,	Dr. Amadon,	Mr. Curtis.
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Visiting Committees.

HIGHLANDS.

Mr. Stewart,	Mrs. Day,	Mr. Curtis.
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CENTRE.

Mrs. Flanders,	Mr. Hill,	Mrs. Day.
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EAST SIDE.

Mr. Marsh,	Mr. Wood,	Mrs. Flanders.
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WYOMING.

Dr. Amadon,	Mrs. Dearborn,	Mr. Wood.
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REPORT OF THE

SUPERINTENDENT OF SCHOOLS.

To the School Committee of Melrose:

LADIES AND GENTLEMEN:—I have the honor to submit for your consideration my fourth annual report regarding the public schools of Melrose. In accordance with the plan adopted in my previous reports, I have confined myself principally to the presentation of such information relating to the administration and work of the schools as parents and others interested to secure an intelligent idea of the school affairs of our city are likely to seek and such as may have permanent historic value.

STATISTICAL TABLES.
TABLE 1. REGARDING SCHOOL HOUSES AND SCHOOL LOTS.

NAME OF SCHOOL.	LOCATION.	SCHOOL HOUSES.						SCHOOL LOTS.			Combined Value of School Houses and Lots.
		Date of Erection.	Material of which Built.	Heating.	Modern Ventilation.	No. of Rooms in Rooms.	No. of Rooms not in use Dec. 1901.	Estimated Value.	Size in Square Feet.	Estimated Value.	
High	Main St.....	1898	Brick & Stone	Indirect Steam	Yes	16*	2§	\$100,000	116,385	\$58,200†	\$158,200
Franklin	Franklin St.....	1897	Brick ...	"	"	8*	0	30,000	21,752	6,575†	36,575
Washington	Lebanon & Lynde Sts	1897	"	"	"	8*	0	30,000	30,794	4,000	34,000
Horace Mann.....	Grove & Myrtle Sts..	'83'91†	Wood ...	Hot Air	"	8	0	20,000	26,361	4,475	24,475
D. W. Gooch	Foster & Florence Sts	'86'93†	Brick ...	Indirect Steam	"	8	0	25,000	27,815	4,450†	29,450
Lincoln	Wyoming Ave.....	1897	"	"	"	8*	0	30,000	27,604	6,900†	36,900
Mary A. Livermore	Main St.....	1891	Brick & Stone	Hot Air	"	4	0	12,000	23,555	6,650†	18,650
Warren.....	Warren St.....	1893	Wood ...	"	"	4	0	14,000†	18,575	2,300†	16,300
Winthrop	Eleventh & First Sts.	1891	"	"	"	4	0	11,000	26,544	1,600†	12,600
Sewall.....	Upland St.	1875?	"	"	"	4	3	8,000†	14,748	7,375†	15,375
Whittier.....	Franklin & Pratt Sts.	1884	"	"	"	4	2	7,500†	15,000	3,000†	10,500
Converse	Fells	1886	"	"	No	2	1	5,000	21,017	1,050	6,050
Ripley.....	Swains Pond Ave ...	1886	"	"	"	1	0	2,200	14,567	575†	2,775
West Side	Franklin St.....	1860?	"	"	"	1	0	1,000	11,880	3,325†	4,325
Totals.....						80	73	\$295,700†		\$110,475†	\$406,175

* These buildings have an assembly hall in addition.

§ One of these rooms is used temporarily by the School Committee.

† Changes from figures given in previous report due to a revaluation by assessors in 1901.

‡ Enlarged.

TABLE II.
NUMBER OF TEACHERS IN THE DIFFERENT DEPARTMENTS,
DEC. 1901.

	High Gr. X-XI-XII- XIII.	Grammar Gr. V-VI-VII- VIII-IX.	Primary Gr. I-II- III-IV	SPECIAL TEACHERS.		Totals.
				Music.	Drawing.	
Males,.....	5	3	0	1	1	10
Females,	7	31	40	0	0	78
Totals.....	12	34	40	1	1	88

COMMENT ON TABLE II.

Comparison of this table with a similar one in the report of 1900 shows a net increase during 1901 of three in the number of teachers employed in our schools. This increase is the result of the abolition of the position of supervisor of physical training in June and of the addition of four teachers to the grades in September.

Regarding the abolition of the position of physical training it may be said that the step was taken with regret. The necessity for economy in school expenditure, however, seemed imperative; and it was felt, after the careful instruction that the grade teachers had received during the past two years from Miss Perham, that physical exercises could be carried on in the grades below the high school with a fair degree of success without a special supervisor. It was understood that so far as the high school was concerned the abolition of a supervisor meant the suspension of physical training for the young ladies; but it was felt that at no other point could curtailment of expense be made with less injury to the school system.

The reasons for the employment of the four additional teachers in the grades are as follows: (1) The extension of the kindergarten work in September necessitated an additional kindergarten teacher for the Horace Mann School; (2) the large number of pupils scheduled for the eighth grade in September compelled the establishment of an eighth grade room at the Washington School and the employment of an additional teacher for the same; (3) for a similar reason an additional ninth grade teacher was required at the Lincoln School; (4) soon after the schools opened in September, owing to the crowded condition of the principal's room in the Sewall School and to the fact that there were two grades in the room, it was deemed necessary to employ another assistant teacher who should divide her time between that room and a room at the Lincoln School in which it was necessary to combine two grades.

TABLE III.

NUMBER OF PUPILS IN THE DIFFERENT GRADES, DEC., 1901.

SCHOOLS.	GRADES.									HIGH SCHOOL.					Totals.
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	Post-Graduate	
High	...	...	...	...	...	...	...	...	...	114	92	54	44	9	313
Franklin	...	...	...	46	47	64	59	47	44	...	...	...	...	...	357
Washington	45	24	26	51	54	49	...	36	49	...	...	...	...	...	334
Lincoln	38	30	13	41	34	31	40	...	73	...	...	...	...	...	300
Horace Mann	48	34	39	48	47	34	47	35	...	...	...	...	...	...	332
D. W. Gooch	23	34	36	45	43	37	34	38	...	...	...	...	...	...	290
Mary A. Livermore	...	...	...	...	50	44	51	44	...	...	...	...	...	...	189
Warren	46	32	45	29	24	...	...	...	...	...	...	...	...	...	176
Winthrop	26	17	22	28	...	...	...	...	...	...	...	...	...	...	93
Sewall	50	39	19	29	...	...	...	...	...	...	...	...	...	...	137
Whittier	61	33	...	...	...	...	...	...	...	...	...	...	...	...	94
Converse	10	11	7	...	...	...	...	...	...	...	...	...	...	...	28
Ripley	9	9	11	...	...	...	...	...	...	...	...	...	...	...	29
Total, Dec. 1901,	356	263	268	317	299	259	231	200	166	114	92	54	44	9	2 672
Total, Dec. 1900,*132	316	268	304	309	270	255	215	202	139	116	61	50	40	9	2,686
Total, Dec. 1899,*140	316	320	289	277	265	242	213	158	122	88	59	47	46	7	2,589

* Independent Kindergartens.

TABLE IV.

AVERAGE NUMBER OF PUPILS PER TEACHER IN THE AVERAGE MEMBERSHIP OF THE SCHOOLS.

GRADES.									High School.	Summary for All Grades.
I	II	III	IV	V	VI	VII	VIII	IX		
20	31	29	44	39	37	46	29	24	25	32

COMMENT ON TABLE IV.

According to the report of the State Board of Education for 1900-1901 the average number of pupils per teacher in

the average membership of the public schools throughout the Commonwealth is approximately 35. According to the foregoing table the average for Melrose is 32. Theoretically, therefore, we are better off in this respect than the State at large. It is not to be understood, however, that the schools of Melrose are arranged so that each teacher has the average number. In spite of the best arrangement that can be made there is considerable difference between the numbers assigned different teachers. For example, our largest first grade has a registration of 61 and our smallest has 23. Owing to the location of these schools, however, nothing can be done to equalize the assignments. In the upper grades no such noticeable differences exist because in those grades it is possible to discharge from one building to another to an extent that cannot be done in the primary grades.

The foregoing table indicates simply that for the number of pupils in the average membership of the schools we employ enough teachers so that, if ideal assignments could be made, each teacher would have nearly the number set by leading educators as the proper number for a teacher to have.

TABLE V.

AVERAGE AGE OF PUPILS IN THE RESPECTIVE GRADES,
SEPTEMBER, 1901, 1900, 1899.

NOTE: Large numbers indicate years, small figures indicate months.

YEAR.	PRIMARY.				GRAMMAR.					HIGH SCHOOL.			
	GRADES.				GRADES					GRADES.			
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
1901.....	5. ⁹	7.	8. ³	9. ⁴	10. ⁸	11. ⁸	12. ⁹	13. ⁹	14. ⁸	15. ⁹	16. ⁵	17. ⁵	18.
1900.....	6.	7. ³	8. ²	9. ⁵	10. ¹¹	11. ¹⁰	12. ⁹	13. ¹¹	14. ¹⁰	15. ⁷	16. ⁶	17. ²	18. ²
1899.....	6.	7. ³	8. ⁹	10.	11.	12. ¹	12. ¹¹	14.	14. ¹¹	15. ⁸	16. ³	17. ²	18. ⁶

COMMENT ON TABLE V.

Reference to the foregoing summary reveals that without exception the average age of pupils in the respective grades below the high school shows a decrease varying from three to six months during the past two years. This has not come about by chance. In my judgment it is due to well-directed effort on the part of teachers to more nearly reach the needs of individual pupils, to the opportunities and encouragement given quick pupils to progress more rapidly than their class as a whole, and to more careful supervision of promotions.

This evident tendency to a lower age average throughout the grades means that many pupils will have their public school career lengthened thereby and that pupils who go to higher institutions of learning will be able to secure their preparation at an earlier age than formerly. Both of these results are desirable, provided they can be secured without impairing the thoroughness of the training that is given.

It will be noted also from the foregoing table that the average ages in the four grades of the high school for the past year are slightly higher than they were two years ago. This result is accounted for by the following facts.

Previous to the school year ending in June, 1898, there had been eight grades below the high school. Therefore, in September, 1899, the two upper classes in the high school were composed of pupils who had entered the school from an eight-year grammar course, while the two lower classes were made up of a considerable percentage of pupils who had spent eight years in the grades and, having done more or less extra summer work on the ninth grade studies, had asked for and been granted permission to enter the high school on trial. During the past two years, however, the standard of the work of that grade has been so raised that,

few pupils have entered the high school who have not taken the regular ninth grade work in the schools. In view of the above facts it is easy to understand why the average ages of the classes in the high school are slightly higher today than they were two years ago.

However, under present conditions, we may expect to see during the next two or three years a steady reduction in the age average of the pupils of this school. Such a result seems to me to be desirable considering that the average graduation age in the school at present is approximately 19 years.

TABLE VI.

SUMMARY BY SCHOOLS OF PRINCIPALS' REPORT FOR
SCHOOL YEAR 1900-1901.

SCHOOLS.	No. Different Pupils Enrolled.	No. of Boys.	No. of Girls.	Average Membership.	Average Attendance.	Per Cent. of Attendance.	One-half Days Absence.	Tardiness.	Cases of Corpor- al Punishment.
High	303	128	175	264.89	251.78	95.05	5,271	164	0
Franklin	353	168	185	338.59	314.31	92.83	8,989	937	2
Washington	350	173	177	320.64	296.88	92.59	7,682	581	3
Lincoln	335	171	164	304.98	286.49	93.94	7,790	316	6
Horace Mann	331	167	164	316.58	302.82	95.65	5,291	1,117	8
D. W. Gooch	278	146	132	264.82	253.04	95.55	4,632	230	0
Mary A. Livermore	200	96	104	181.86	174.71	96.07	2,577	101	0
Warren	164	85	79	153.00	145.12	94.85	2,892	176	0
Winthrop	110	56	54	103.84	97.50	94.85	2,299	379	1
Sewall	180	80	100	161.58	148.04	91.62	4,613	360	8
Whittier	148	79	69	120.31	105.98	88.16	3,889	213	2
Converse	41	24	17	37.60	36.11	96.01	657	90	0
Ripley	33	15	18	30.28	27.29	90.13	787	108	0
Total	2,826	1,388	1,438	2,598.95	2,440.07	93.88	57,369	4,772	32

TABLE VII.

SUMMARY BY GRADES OF PRINCIPALS' REPORT FOR THE
SCHOOL YEAR, 1900-1901.

GRADES.	No. Different Pupils Enrolled.	No. of Boys.	No. of Girls.	Average Membership.	Average Attendance.	Per Cent. of Attendance.	One-half Days Absence.	Tardiness.	Cases of Corporal Punishment.
High	303	128	175	264.89	251.78	95.05	5,271	164	0
Grade IX	139	74	65	134.99	129.15	95.67	2,159	161	3
“ VIII.....	195	91	104	132.97	175.20	95.75	2,989	250	0
“ VII.....	235	111	124	224.41	212.45	94.67	4,583	344	1
“ VI.....	261	126	135	249.02	236.28	94.88	4,926	582	4
“ V.....	294	148	146	269.31	254.80	94.61	5,669	454	2
“ IV.....	317	149	168	298.21	281.84	92.65	5,726	502	10
“ III.....	268	137	131	261.34	248.64	95.14	4,769	419	5
“ II.....	255	130	125	237.93	220.99	92.46	6,055	570	4
“ I.....	318	177	144	283.80	260.70	91.86	8,979	823	3
Kindergarten	167	78	89	124.20	104.84	84.41	4,799	305	0
*Combined Grades (I. II, III).....	74	39	35	67.88	63.40	93.40	1,444	198	0
Total.....	2,826	1,388	1,438	2,598.95	2,440.07	93.88	57,369	4,772	32

* Ripley and Converse Schools.

TABLE VIII.

COMPARATIVE STATISTICS ON ATTENDANCE.

1. AVERAGE MEMBERSHIP.

SCHOOLS.	1897	1898	1899	1900	1901
High.....	241.18	220.49	229.19	250.26	264.89
Franklin	313.40	315.52	343.63	337.42	338.57
Washington	285.56	356.46	332.89	305.52	320.64
Lincoln .....	.....	190.79	225.19	292.11	304.98
D. W. Gooch	365.83	327.17	297.49	271.05	264.82
Horace Mann.....	328.11	300.79	280.26	298.20	316.58
Mary A. Livermore ..	176.52	179.35	174.59	170.06	181.86
Warren	138.39	110.64	126.43	142.01	153.00
Winthrop ...	150.56	135.34	128.64	113.84	103.84
Sewall	170.45	152.32	160.36	164.48	161.58
Whittier	133.90	115.02	107.60	114.89	120.31
Converse	64.65	50.00	42.96	40.97	37.60
Ripley	37.00	36.42	36.16	28.34	30.28
West Side Kinderg't'n .....	.....	15.84	20.82	11.43	.....
Totals.....	2,505.55	2,506.15	2,506.21	2,540.57	2,598.95

2. AVERAGE ATTENDANCE.

SCHOOLS.	1897	1898	1899	1900	1901
High.....	229.60	212.17	220.73	239.56	251.78
Franklin	292.05	296.78	322.89	314.36	314.31
Washington	252.20	330.91	310.12	286.75	296.88
Lincoln .....	.....	178.41	206.91	270.72	286.49
D. W. Gooch	332.10	307.33	282.44	258.76	253.04
Horace Mann.....	287.10	284.93	270.55	284.23	302.82
Mary A. Livermore ..	164.70	170.59	168.56	163.92	174.71
Warren	128.75	104.96	120.33	136.12	145.12
Winthrop	130.60	125.52	120.87	106.63	97.50
Sewall	144.50	134.79	144.58	148.93	148.04
Whittier	112.50	104.80	98.46	105.57	105.98
Converse	56.00	47.87	41.76	40.02	36.11
Ripley	30.60	31.16	31.54	26.56	27.29
West Side Kinderg't'n .....	.....	13.59	17.76	9.76	.....
Totals.....	2,260.70	2,343.91	2,357.50	2,391.89	2,440.07

3. PER CENT. OF ATTENDANCE.

SCHOOLS.	1897	1898	1899	1900	1901
High.....	95.20	96.22	96.31	95.72	95.05
Franklin	93.19	94.06	93.96	93.23	92.83
Washington	91.32	92.83	93.16	93.86	92.59
Lincoln .....	.....	93.45	91.88	92.68	93.94
D. W. Gooch	90.78	93.94	94.94	95.47	95.55
Horace Mann.....	87.50	94.73	96.54	95.32	95.65
Mary A. Livermore ..	93.19	93.17	96.54	96.39	96.07
Warren	93.03	94.87	95.18	95.85	94.85
Winthrop	86.74	92.74	93.95	93.67	94.85
Sewall	84.78	88.46	90.16	90.55	91.62
Whittier	83.27	91.20	91.51	91.89	88.16
Converse	86.62	95.74	97.21	97.68	96.01
Ripley	82.70	85.51	87.22	93.72	90.13
West Side Kinderg't'n .....	.....	94.48	85.31	84.51	.....
Totals.....	90.23	93.53	94.07	94.15	93.88

COMMENT ON TABLE VIII.

(1) Reference to the above table shows an increase of 58.28 in the total membership of the schools for the past school year. This is the largest increase during any year since my connection with the schools of Melrose. It is also

worth noting that, while the membership of the schools as a whole has increased 3.7% during the past five years, the membership of the high school has increased 9.8% during the same period. In other words, the membership of our high school during the past five years has increased nearly three times as fast as the total membership of the schools throughout the city. The force of these figures is intensified when one takes into account that since the fall of 1897 the course of work preceding the high school has been lengthened one year,—a fact that might fairly be expected to work against an increase of membership in the high school for reasons so obvious as to require no comment.

During the above mentioned period the average membership of grade IX has increased 63%; of grade VIII, 66%; of grade VII, 21%; and of grade VI, 17%. From the foregoing statements it is evident that during the past five years the average increase of the membership for the four upper grades and the high school is 35%, while the average increase for all grades throughout the city is practically 4%.

Whatever other causes may have contributed to this relatively large increased attendance in the upper grades, I feel certain that the administration of our schools and the character of the work that is being done in them have contributed no little to the result.

The tendency indicated in the above figures toward a prolongation of the period that the children remain in our schools has increased not only the total school expenditure, but also the per capita cost for education in the city, since it costs considerably more to provide the facilities for training in the higher grades than it does in the lower grades. The effect that this relatively large increase in the membership of our upper grades has had upon the per capita cost is apparent even to an amateur in logic when it

is understood that in the average city schools the cost per pupil for education in the primary grades is not far from \$20, while the cost per pupil in the high schools approximates \$60. In spite of the fact that this increase in membership in the upper grades of the schools has helped in no little degree to swell the cost of public education in our city, I believe that it is a matter for general congratulation that our young people are evincing an increased desire to prolong their course of training in the schools. I am convinced that the broader education they will thus receive will enrich our community life to a degree that will far outweigh the extra financial burden required to support the necessary schools.

Then, too, it has been demonstrated by reliable authorities that, generally speaking, the earning capacity of an individual bears a well-defined relation to his educational development,—a fact that should not be overlooked by those who are responsible for the appropriation of money for school purposes.

Statistics compiled by the Commissioner of Education for the United States show that each child in Massachusetts receives on an average 63% more schooling than the average for each child in the nation at large; and the chief of the Labor Bureau of Statistics for Massachusetts tells us that the average wealth-producing power for each man, woman, and child in Massachusetts is 78% greater than a similar average for each man, woman, and child in the nation at large.

With due consideration for other elements that may contribute to increase the wealth-producing capacity of residents of Massachusetts over that of the nation at large, it is a fair inference, I think, from the above approximate correspondence of the percentages representing the excess in

Massachusetts, both in length of the average schooling period and in the average wealth-producing power, that the prosperity of a community has a well-defined dependence upon the average period of school life of its citizens.

(2) Referring to the per cent. of attendance in the foregoing table, it will be seen that, while the per cent. for the past year is 3.58 higher than in 1897, there is a slight falling off from the per cent. of 1900. This is due principally to an epidemic of whooping cough that continued through the last half of the school year.

However, in spite of this fact, it is probably true that, if all parents were as careful as many are not to permit pupils to absent themselves from school except for unavoidable causes, the per cent. of attendance for the past year might have been higher than it has been during any previous year within my knowledge. Pupils are too frequently permitted to absent themselves from school tasks simply because they do not feel in a mood to attend or because they wish to indulge in some pleasure that is by no means necessary. So far as the individual child is concerned, the worst result from such irregularity is not the loss that he sustains with respect to class instruction, but it is the habit that the child thus acquirers of shrinking from duty to gratify a sense of ease or pleasure. A child thus indulged will go out into life handicapped to a degree for the struggle that lies before him. As a rule, the individual who succeeds in these days of strenuous endeavor is the one who early in life has learned to make self-gratification secondary to the discharge of duty.

TABLE IX.

SCHOOL CENSUS AND ENROLLMENT.

No. persons between 5 and 15 years of age residing in the city, September 1, 1901.....	1,997
No of persons between 7 and 14 years of age residing in the city, September 1, 1901.....	1,405
No. of different pupils enrolled during school year from Sept., 1900 to June, 1901.....	2,826
No. of pupils over 15 years of age enrolled during the school year, 1900-1901.....	380
No. of pupils between 5 and 15 years of age enrolled during the school year, 1900-1901.....	2,280
No. of pupils between 7 and 14 years of age enrolled during the school year, 1900-1901.....	1,524
No. pupils under 5 years of age enrolled during the school year, 1900-1901.....	166

TABLE X.

ANNUAL FINANCIAL EXHIBIT FOR 1901.

A. GENERAL STATEMENT.

Receipts.

Appropriation for 12 mo. from Feb. 1, 1901 to Feb. 1, 1902.....	\$77,000.00
From Stoneham and Wakefield for tuition.	1,932.11
Additional appropriation for fuel and repairs.....	2,450.00
Am't available for 12 mo. from Feb. 1, 1901 to Feb. 1, 1902.....	\$81,382.11

Expenditures.

Salaries (Teachers, Janitors, Superintendent, Clerk)	\$61,384.35
Books and Supplies.....	5,799.26
Fuel	7,449.89
Repairs	3,700.00
Miscellaneous	1,478.62
Furniture	599.71
Transportation	480.00
Advertising and Printing.....	270.95
High School and Teachers' Libraries	99.76
Total expenditure for 12 mo. from Feb. 1, 1901 to Feb. 1, 1902.....	\$81,262.54
Unexpended balance.....	\$119.57

B. AVERAGE EXPENDITURE PER PUPIL.

(Based on the average membership of the schools (2,600.31) for the financial year.)

For teaching.....	\$20.23	
For supervision (superintendent and clerk).....	1.07	
For books and supplies.....	2.23	
For janitors.....	2.31	
For fuel.....	2.87	
For printing.....	0.10	
For transportation.....	0.18	
For High School and Teachers' libraries.....	0.04	
For miscellaneous purposes (not including repairs, furniture and new buildings).....	0.57	
Total cost (excluding repairs, furniture and new buildings).....		\$29.60
For furniture.....	0.23	
For repairs.....	1.42	
Total cost for all purposes.....		*\$31.25

*The corresponding cost for the State at large is \$34.92.

TABLE XI. COMPARATIVE FINANCIAL EXHIBIT COVERING PAST FOUR YEARS.

A. GENERAL STATEMENT.

	1898	1899	1900	1901
<i>Receipts:</i>				
Balance from previous year	\$1,215.39			.....
Appropriation for year	75,000.00	\$ 5,022.69	.....	\$77,000.00
Receipts for tuition, etc.	354.50	65,000.00	\$77,000.00	1,932.11
Supplementary appropriation .....	.....	1,061.31	1,176.08	2,450.00
Total amount available	\$76,569.89	.....	.....	.....
		\$71,084.00	\$78,176.08	\$81,382.11
<i>Expenditures:</i>				
Salaries	\$50,743.37	\$56,486.49	\$60,141.47	\$61,384.35
Books and Supplies	5,118.95	5,775.21	5,123.00	5,799.26
Fuel	6,003.63	3,806.11	7,060.08	7,449.89
Repairs	3,409.80	2,884.50	2,681.89	3,700.00
Miscellaneous	1,763.15	1,806.34	1,771.87	1,478.62
Furniture	4,323.00	1,564.23	1,036.07	599.71
Transportation .....	.....	.....	.....	480.00
Advertising and printing	185.30	260.45	361.70	270.95
High School and Teachers' Libraries.	.....	.....	.....	99.76
Total expenditure	\$71,547.20	.....	\$78,176.08	.....
		\$72,583.33	.....	\$81,262.54
Unexpended balance .....	.....	.....	.....	.....
Excess of expenditure	\$5,022.69	.....	.....	119.57
	.....	1,499.33	.....	.....

B. AVERAGE EXPENDITURE PER PUPIL.

(Based on the average membership for financial year.)

	1898	1899	1900	1901
For teaching	\$17.44	\$19.10	\$20.31	\$20.23
For supervision (Superintendent and Clerk)	.83	.94	.98	1.07
For books and supplies	2.04	2.38	2.02	2.23
For janitors	1.98	2.50	2.38	2.31
For fuel	2.39	1.52	2.78	2.87
For printing	.07	.10	.14	.10
For transportation				.18
For High School and Teachers' Libraries				.04
For miscellaneous purposes (not including repairs, furniture and new buildings) ..	.71	.72	.70	.57
Total cost (excluding repairs, furniture and new buildings)	25.46	27.18	29.31	29.60
For furniture	1.72	.62	.41	.23
For repairs	1.36	1.15	1.06	1.42
Total cost for all purposes	\$28.54	\$28.96	\$30.77	\$31.25

COMMENT ON TABLE XI.

The increase in the gross expenditure for school purposes during the past four years as shown in the above table results (1) from the increase in the membership of the schools which is sufficient of itself at the average cost per pupil to make the gross expenditure in round numbers \$3000 greater than in 1898, and (2) from the gradually increasing per capita cost for educating our pupils which can be seen by reference to the second division in the foregoing table.

This increasing per capita cost is naturally and properly a matter of considerable interest to our citizens, therefore the following statements are submitted which contain the principal reasons for this increase.

Reference to division B in the foregoing table shows that since 1898 the per capita cost for all purposes has increased \$2.71. The principal items concerned in this increase are the expenditures for teaching, supervision, books and supplies, janitors and fuel. The increase in the annual expenditure per pupil for teaching is mainly accounted for by

the following facts: (1) For 1898 the average salary of the male teachers (omitting the special teachers) in our corps was \$102.19 per month for a ten-month year. For 1901 the corresponding average was \$125.36. Obviously this increase of 23% in the average monthly salary of our male teachers would tend to raise the per capita cost for teaching, unless there should be a considerable decrease in the meantime in the number of male teachers employed, which has not been the case, since the number of male teachers in our corps today is only one less than in 1898. There are good reasons for the above noted increase in the salaries of our male teachers. These teachers are employed either as principals of large buildings or in responsible positions in connection with the High School. In 1898, the male grammar principals were being paid either \$750 or \$800 per year. At present the men who hold these positions receive \$1000 or \$1200 per year.

When the large grammar buildings in the city were first opened, it was possible to secure young men as principals for \$750 and \$800 because the location of our city and the character of our population are such as to afford good opportunities for young men to train themselves for greater efficiency and larger responsibility and also because it was reasonably certain that, if they succeeded in their work here, either Melrose must pay them more or other places would.

An efficient man cannot be retained at the head of a school for any great length of time in these days for \$800 or \$900. During the past four years, in spite of the fact that the salaries of the grammar principals have been advancing as rapidly as the finances of the committee have seemed to warrant, we have lost two excellent men to higher salaried positions, and the only reason that has prevented

the loss of a third is the fact that the committee advanced his salary to \$1200 owing to an offer of \$1300 that he had received from Revere. In my judgment there are only two ways to prevent advancing the salaries of our grammar principals to a figure that approximately corresponds to the market value of good men in similar positions in other places, either (1) to let efficient men go as soon as they are offered more elsewhere and continue to use our schools as a training ground for young men who are seeking experience, or (2) to employ female principals throughout our grammar schools. I feel confident that no sane citizen in Melrose would deem it wise to change the principals of our grammar schools continually, provided such changes could be largely prevented by paying salaries equal to the average paid for similar work in progressive communities. I am well aware that the burden of public taxation in the city is already heavy, but I believe that, when there is in charge of any of our large grammar schools a manly man who is administering his school in a satisfactory manner, Melrose can afford to pay and should pay him at least \$1200 or \$1300. If after two or three years of successful service, a man is not worth that to the city he is not worth keeping as a principal.

Regarding the proposition to keep down salaries by the employment of female principals, I may say that such a policy, beyond the limit now in practice in our schools, does not commend itself to me. Although a woman may manage a school as successfully as a man, yet, I feel that, during the latter part of the grammar course, it is highly desirable for the best development of our young people—especially the boys—that we should have before them a larger per cent. of the masculine element than there ordinarily is in the public school teaching corps, even if it does cost more.

Notwithstanding the fact that the salaries of our male

grammar principals have been raised somewhat during the past three years for the reasons suggested above, it still remains true that the average salary for such positions is less in Melrose than in any neighboring city.

(2) Another factor that has had a slight effect upon the per capita cost is a small increase in the salaries of the female principals of our grammar buildings. This has been simply a matter of justice in consideration of the added responsibilities put upon the incumbents of those positions during the past few years; and in my judgment the salaries of these positions may well be further increased without subjecting the committee to the charge of extravagance in this respect, since the average salary for female principals of grammar buildings in Melrose at present is only \$833.33

(3) Another fact that has contributed to increase the per capita cost for education in Melrose is the employment of principals' assistants in the grammar buildings. In 1898 none were employed. In 1901 there were six, distributed as follows: one at the Washington School, one at the Horace Mann, one at the Lincoln, one at the D. W. Gooch, one at the Franklin, and one who divided her time between the Mary A. Livermore and the Warren Schools. The combined salaries of these teachers for the year was \$2,990 and added \$1.15 to the average cost per child for teachers. To one who sees only the dollars and cents involved, this extra expenditure would seem an extravagance, but one who is familiar with school work knows that the chief value from the service of a principal is not derived from the teaching that he does in the class room, but from the supervision that he exercises over the administration of the schools in his building, from the encouragement he gives to his teachers, from the inspiration he brings to the pupils under his charge, and from the extent to which he contributes to har-

monious relations between teachers and parents. It is evident, therefore, that a principal who is supplied with an assistant is in a position to be much more efficient than one who has none and is confined to class room instruction during practically the entire time of the school session.

In addition to the duties usually put upon principals' assistants, the teachers who are holding those positions in our schools do more or less special work with pupils from the various grades in the buildings as they are found for any reason to need such special assistance. In this way many a child who would otherwise lose a grade is enabled to hold his place, while others whose capabilities would admit have been enabled to gain a year through special promotion.

The employment of principals' assistants has not only contributed to better educational results in our schools, but it has also improved the character of the discipline in them by enabling the influence of the principals to be felt more largely throughout the buildings.

It is my opinion, as intimated above, that to pay a principal an extra salary of two or three hundred dollars to have charge of a building and then to confine him to the work of teaching in the class-room throughout the session as was formerly done is a wasteful expenditure of money. On the other hand, I am confident that the employment of assistants to the principals of our grammar buildings, even though it costs annually \$1.15 extra per child for teaching, is wise economy, considering the purpose for which our schools are maintained.

(4) Another thing affecting the per capita cost in our schools is the policy adopted by the committee in 1899 whereby teachers who are temporarily absent on account of sickness suffer no loss of pay "provided such absence does not aggregate more than five days in any school month or

fifteen days in a school year." Previous to this arrangement teachers absent for any cause were obliged to pay substitutes from their own salaries. During 1901 it cost the school department \$323.25 to pay substitutes under the above rule. While this plan adds something to the per capita cost, it seems only just considering the small salaries that the average teacher receives.

(5) During the past four years the membership of the High School has increased to an extent that has compelled the addition of two teachers to the corps of that school. Necessarily, the average salary for the teachers in the High School work is higher than the average for the grades, therefore it is clear that herein lies another reason for a slight increase in the per capita cost for the education of our young people.

(6) Again, in 1898 the salary of Mr. Greene, the head of the Commercial Department in the High School, was \$1000, the salary of Mr. Scott, the head of the English Department, was \$1000, and the salary of Mr. Shaw, the head of the Science Department, was \$900. That these salaries were inadequate to enable Melrose to retain the services of first-class instructors is evident from the fact that, although Mr. Shaw's salary was advanced to \$1200, he was tempted to another school by a larger salary, and also from the fact that both Mr. Greene and Mr. Scott have received offers from other cities of larger amounts than they were receiving, so that, in order to retain their services, the committee has been compelled to raise the salary of each of these men to \$1300. While these increases in salaries have made the cost per pupil in our schools slightly greater than formerly, the city has undoubtedly received an equivalent in the services rendered by these men.

(7) Another factor that should not be overlooked in

seeking causes for the increased cost per pupil for education in our schools during the past few years is the following: while the number of different pupils registered in the different grades in December, 1901, was only two greater than in December, 1899, the number registered in the High School and in the grammar grades in 1901 was 221 greater than in 1899. The fact that the enrollment of these upper grades has increased during the past two years so much more rapidly than the enrollment of the primary grades explains in part, at least, not only the larger total expenditure for books and supplies for our pupils, but also the increased average expense per pupil for the same, since it costs considerably more to supply material for a pupil in the High School or grammar grades than one in the primary grades.

(8) Reference to exhibit B in the foregoing table shows that the per capita cost of fuel has increased from \$2.39 in 1898 to \$2.87 in 1901. This increase is in part due to the fact that the new High School building which was completed in 1898 was in use only two-fifths of the financial year; therefore, in general terms, the consumption of coal in that building for 1901 was about 165 tons more than in 1898. This represents an additional expenditure for coal for 1901 of \$800 at least over that for 1898, or a per capita increase of 31 cents. The balance of the increase is due to the fact that in 1899 the town, unwisely it seems to me, curtailed the appropriation for fuel so that the amount of money at the command of the school committee was only sufficient to purchase coal enough in the summer to last the schools until about the first of January. This policy has not only forced the committee during the past two years to purchase more or less coal in the winter months when prices were relatively high, but also in order to get back to the practice of purchasing in the summer the bulk of the

coal needed for the school year, it has made it necessary to expend annually an amount larger than would be required normally to supply the schools for the ten months of the school year. It should not be forgotten, also, in considering the increased expenditure in this line that during the past year the ruling price of coal has been higher than in 1898, which, of course, would tend to increase the per capita cost even if the consumption were no larger.

(9) The foregoing table reveals also that the cost per pupil for supervision has risen from .83 in 1898 to \$1.07 in 1901. The reasons, therefor, are as follows: For some time prior to 1898 it had been felt by the committee that there was need for clerical assistance in the office of the Superintendent of Schools; and at the opening of the fall term of that year Miss Helen L. Burr was employed at a salary of \$5 per week. The value of this arrangement to the schools in increased efficiency in the department of supervision has led to its continuance and to a gradual rise in the amount paid for such assistance until at the present time the salary paid for this work is \$450 per year. This fact, coupled with an increase in the Superintendent's salary in 1899 and in 1901, explains the increased expenditure in supervision during the past four years.

(10) Regarding the increase shown in the table in the per capita cost for janitors, it may be said that this result is due to a small increase in the salaries of several of the janitors of the larger buildings, and also to the fact that, when the new High School building was opened in September, 1898, it became necessary to add to the corps another janitor and to employ an engineer to have charge of the heating and ventilating apparatus in that school, whose pay is drawn from the fund appropriated for janitors.

Since these additions to the force were employed only five

months of 1898, while they were on the pay roll for the full 12 months of 1901, it is easy to see therein a reason for a considerable portion of the increased amount paid for janitor service during the past year over what was paid for the same in 1898.

During 1900 the janitor of the Washington School was discharged and Mr. Weeks, who for several years previous had been employed as general repair agent and who had been paid for such service \$780 per year from the janitor's fund, was assigned to this vacant janitorship. The saving thus effected has made the expenditure for janitors in 1901 several hundred dollars less than it otherwise would have been, although the total school expenditure has not been materially changed thereby, since the amount that it has been necessary to pay carpenters, plumbers, and expressmen for work formerly done by Mr. Weeks does not differ much from the salary that he had received.

The slight increase in the salaries of several of the janitors that has been made during the past two years seemed a matter of justice in view of the additional demands put upon them by the new regulations adopted by the committee in 1899.

TABLE XII.
CHANGES IN THE TEACHING FORCE DURING 1901.

I. WITHDRAWALS.

Name of Teacher.	Position Held.	Date of Withdrawal.
Mary G. Ellis.....	Kindergarten, Whittier	 March 1901
Barbara S. Fellows.....	2nd and 3rd grades, Sewall.....	 May 1901
H. H. Tucker.....	Principal, Franklin	 June 1901
Elizabeth M. Collins	6th grade, Franklin	 June 1901
Fanny L. Warren	Kindergarten, Washington.....	 June 1901
G. Alvin Grover	Principal, Lincoln	 June 1901
Olie B. Burgess	2nd grade, Horace Mann	 June 1901
Mary V. Perham.....	Supervisor Physical Culture.....	 June 1901
Minnie R. Donaldson.....	5th grade, Lincoln.....	 July 1901
Herbert L. Rand.....	Principal, Washington	 October 1901
Catherine E. Smith	3d grade, D. W. Gooch	 October 1901
Grant Drake.....	Supervisor of Music.....	 October 1901
Martha F. Smith.....	2nd grade, Sewall.....	 December 1901
Mae Goodwin.....	8th grade, Washington.....	 December 1901
Marion G. Leslie.....	Kindergarten, Sewall	 December 1901

2. TRANSFERS.

Name of Teacher.	Position Held.	Position to which transferred.	Date, 1901.
Alma J. Guptill	7th grade, Franklin	4th grade, Franklin	June
Minnie F. C. Snow	4th grade, Franklin	4th grade, Washington	June
Ethel E. Thomas	6th grade, Washington	7th grade, Lincoln	June
Maud E. Brown	Kindergarten, Washington	1st grade, Gooch	June
Annie M. C. Washburn	Principal's assistant, Lincoln	Principal, M. A. Livermore	June
Cora S. Burleigh	7th grade, Lincoln	Principal's assistant, Lincoln	June
Frances B. Brown	1st grade, Lincoln	1st grade, Whittier	June
Augustus O. Burke	Principal, D. W. Gooch	Principal, Lincoln	June
Lydia Mendum	Principal's assistant, D. W. Gooch	Principal's assistant, Lincoln	June
Mae Goodwin	7th grade, D. W. Gooch	8th grade, Washington	June
Eva R. Crane	Principal, M. A. Livermore	Principal, D. W. Gooch	June
Louise G. White	7th grade, M. A. Livermore	7th grade, Franklin	June
A. Arline Merrill	1st grade, Sewall	2nd grade, Horace Mann	June
Jeannette A. Doane	1st grade, Whittier	1st grade, Lincoln	June
Mabel Price	Kindergarten, Whittier	1st grade, Warren	June
Geneva B. Davidson	1st grade, Winthrop	1st grade, Sewall	June
Bertha W. Leighton	Kindergarten, Sewall	1st grade, Washington	June
Mabel Gilbride	Assistant, Converse	Ripley	June
Mary A. Chisholm	Ripley	1st grade, Winthrop	June
A. Pauline Ham	2nd and 3rd grades, Sewall	6th grade, Franklin	July
Lillian Tufts	Kindergarten, Lincoln	1st grade, Horace Mann	July
Ethel E. Clark	6th grade, Mary A. Livermore	3rd grade, D. W. Gooch	Oct.
Katharine V. Rowe	Principal's assist't, Warren & Livermore	6th grade, M. A. Livermore	Oct.
Flora M. Haley	7th grade, M. A. Livermore	5th grade, Horace Mann	Dec.
Naomi E. Stevens	7th grade, Horace Mann	7th grade, M. A. Livermore	Dec.
A. Louise McCormick	5th grade, Horace Mann	7th grade, Horace Mann	Dec.
Mary A. Chisholm	1st grade, Winthrop	2nd grade, Sewall	Dec.

3. NEW TEACHERS.

Name of Teacher.	Position Held.	Position to which transferred	Began work 1901
Marion P. Goodwin	Not teaching	Kindergarten, Whittier	 April
Lillian M. Tufts	Student, Miss Symond's Training School	Kindergarten, Lincoln	 "
A. Pauline Ham	Student, Salem Normal	2nd and 3rd grades, Sewall	 May
Archer C. Bowen	Principal Belknap School, Dover, N. H.	Principal, Franklin	 Sept.
Mary S. Haley	Student, Framingham Normal	5th grade, Lincoln	 "
Helena L. Wright	3rd grade, Vinalhaven, Me.	Principal's assistant, D. W. Gooch	 "
Ina M. Lancaster	Primary, Stonington, Me.	7th grade, D. W. Gooch	 "
Flora M. Haley	Grammar grade, Stonington, Me.	7th grade, M. A. Livermore	 "
Helena M. Hocking	Student, Miss Wheelock's Training Class	1st grade, Winthrop	 "
Martha F. Smith	Not teaching	2nd grade, Sewall	 "
Mattie C. Mirfield	"	Assistant, Sewall and Lincoln	 "
William A. Reed	"	Principal, Washington	 Oct.
Florence E. Worthing	"	Assistant, Warren and Livermore	 "
Alvin C. Saunders	Supervisor of Music, Watertown, Dan- vers and Whitinsville	Supervisor of Music	 Nov.
Grace E. Chamberlain	8th grade, Wilmington, Mass.	8th grade, Washington	 Dec.
Bessie Chase	1st grade, Reading, Mass.	1st grade, Winthrop	 "
Leslie King	Not teaching	1st grade, Sewall	 "

COMMENT ON TABLE XII.

The first division of the foregoing table shows that 15 teachers or 17% of the number employed in December 1901, withdrew from the corps during the year. Of this number three left school work to be married, one because it seemed to the school authorities to be for the best interests of the schools, one because she considered the salary inadequate, one on account of her physical condition, one on account of sickness in her family, one because, in the interest of economy the position that she had held was abolished, and seven because they were offered higher salaries elsewhere.

The fact that 47% of the teachers who have withdrawn from the corps during the past year have left for increased salaries coupled with the fact that in nearly every case these have been among our best teachers, naturally suggests the consideration of the possibility of increasing the salaries of our grade teachers sufficiently to minimize the chances of losing, every now and then, some of our best teachers.

I have heard citizens repeatedly remark that the committee ought to pay teachers higher salaries in order to retain them. No one can regret more than the Superintendent of Schools to see a valuable teacher go from the corps; but I have no expectation that it is possible for Melrose to protect itself entirely from loss in this respect, nor do I think it a good business proposition under present conditions to make a uniform maximum salary higher than is now paid in the grades. In my judgment, it would be wiser to leave the uniform maximum at the present figure, \$550, and, as I suggested in my report for 1899, when, by specially meritorious work and by professional zeal, a teacher has proved herself worthy of special recognition, to advance her salary

beyond this uniform maximum to a figure which the committee may consider fair both to the teacher and to the taxpayer. Obviously such a plan would not protect us completely from the loss of our best teachers, but it would certainly minimize the possibility of such loss.

Referring to the second division of the foregoing table it will be noted that 27 transfers of teachers have been made during the year. The primary object of these changes has been to secure increased efficiency in the schools as a whole; and, in the main, the results have justified the change, although in the case of a teacher transferred from the Mary A. Livermore to the Horace Mann School disastrous results followed.

Regarding the 17 new teachers who have been employed during the year, I am pleased to report that the majority have proved desirable acquisitions to our corps and are exhibiting a commendable degree of success and professional zeal. A few, however, whom we were compelled to employ without the opportunity of inspecting their work have been unable to adjust themselves sufficiently to the conditions of our schools to make their work with us a success, and have felt compelled to resign.

In filling the vacancies occasioned by such resignations the utmost care has been exercised. Whenever possible only those whose work had been inspected and approved have been employed and it is believed that thoroughly competent teachers have been secured.

TABLE XIII.
PROFESSIONAL TRAINING OF TEACHERS.

	Per Cent.
1. Proportion of teachers who are graduates of Normal Schools, ..	37
2. " " " " have had partial course at Normal Schools,	5
3. Proportion of teachers who are graduates of College,	13
4. " " " " have had partial course in College, ..	2
5. " " " " are graduates of Kindergarten Train- ing Schools,	12
6. Proportion of teachers who have had course in City Training School,	5
7. " " " " are without training in College, Nor- mal School, Kindergarten School, or City Training Class,	26

COMMENT ON TABLE XIII.

The foregoing table indicates that, as a whole, our teachers have had a fair degree of professional training; but, whatever preparation a teacher may have had previous to entrance upon her work, she will soon find herself behind the times in these days of rapid changes, unless, through constant reading, study, and attendance upon educational meetings, she continues to grow professionally. In this connection I am glad to say that I know of no community in which the prevailing professional spirit among the teachers is more active than in Melrose at the present time, although there are a few teachers whose desire for professional growth is hardly commensurate with their need. However, it may be said of these teachers that the spirit of the corps as a whole is not without its helpful effect upon them.

During the year it has been possible to provide, in addition to two general talks by myself, the following lectures for the improvement of the teachers:—(1) "What the Pupils Taught the Teacher," by Wm. C. Bates, Superintend-

ent of Schools, Fall River; (2) "Literature in Life," by W. W. Stetson, State Superintendent of Schools in Maine; (3) "Physical Defects of Children," by A. K. Whitcomb, Superintendent of Schools, Lowell; (4) "The Public School of the Twentieth Century," by G. I. Aldrich, Superintendent of Schools, Brookline. These lectures have been provided at the expense of the school department. Through the Melrose Education Society the teachers received the benefit of several other valuable lectures and conferences.

In addition to the above general meetings, the Supervisor of Drawing has conducted classes in drawing for such teachers as wished to improve themselves in this line; the Supervisor of Music has held several grade meetings and has just closed a series of class lessons in music with about fifty teachers, who voluntarily took up the work, and I have held various meetings with principals and grade teachers as I have had opportunity and conditions seemed to require.

The professional growth of the teachers has been further advanced by the following work which they have done during the year. Through reports recently submitted it is learned that eighty-one of the teachers have read regularly during the year from one to four educational periodicals. Not including the special teachers of Music and Drawing, there are eighty-six teachers in the corps, therefore it appears that five teachers have reported no educational periodicals read regularly. Nineteen teachers report further that they have read during the year one educational book, nineteen that they have read two, thirteen that they have read three and thirty-one that they have read more than three. It appears, therefore, that ten have not read a single book during the year that may be called properly an educational work.

While it may be fairly expected, as a rule, that no live

teacher would permit a year to go by either without reading regularly some good educational periodical or without reading some stimulating educational book, yet it must not be inferred, off hand, that all of the above teachers who report that they have read no educational paper regularly or all who report that they have read no educational work during the year, are lacking in proper professional spirit. Several have been working diligently to improve themselves along special lines calculated to give them greater efficiency in their chosen work and they have not read along the above lines because time and strength would not permit. On the other hand there are a few whom I cannot excuse on this ground for their lack of professional reading.

My reports show further that six teachers attended summer schools, thirty-nine pursued systematic courses of home study in one or more subjects, and forty-five took courses of study in evening or Saturday classes in English, Science, Music, Art, etc.

When one considers that all of the foregoing work, excepting attendance upon local meetings, has been voluntary, it will be conceded, I think, that with very few exceptions, our teachers have shown a commendable professional spirit. It has been my purpose to assist, as far as possible, in developing such a spirit in the corps, for I conceive that a teacher who is deficient in this respect is a less helpful factor in the corps than she ought to be, I care not how well she may discipline her pupils or how correctly from the standpoint of method she may present her subjects of study. It is my belief that no teacher can long neglect to read and study educational literature without losing in power to enthuse pupils to the best of which they are capable.

TABLE XIV.

TIME LOST BY TEACHERS FOR SICKNESS, ETC., 1901.

SCHOOL.	No of Teachers.	No. of Teachers who have Lost Time.	Days Lost.	Average per Teacher for building.
High	12	11	24	2 days
Franklin	9	6	33	3 $\frac{3}{8}$ "
Washington	10	8	27	2 $\frac{7}{10}$ "
Lincoln	10	6	26 $\frac{1}{2}$	2 $\frac{13}{20}$ "
Horace Mann.....	9	4	14	1 $\frac{5}{9}$ "
D. W. Gooch	9	5	19	2 $\frac{1}{9}$ "
Mary A. Livermore ..	5	6	19 $\frac{1}{2}$	3 $\frac{9}{10}$ "
Warren	4	4	9	2 $\frac{1}{4}$ "
Winthrop	4	4	17	4 $\frac{1}{4}$ "
Whittier	5	2	24 $\frac{1}{2}$	6 $\frac{1}{8}$ "
Converse	1	0	0	0
Ripley	1	1	2	2

TABLE XV.

COMPARATIVE STATISTICS REGARDING CORPORAL PUNISHMENT.

YEAR.	From January to June Inclusive.	No. Different Teachers Reporting the Same.	Per cent. of Teachers Reporting no Cases.
1899	65	22	71
1901	23	12	86
Per cent. of decrease	65	45	..

COMMENT ON TABLE XV.

While corporal punishment is permitted by the regulations of the School Committee in extreme cases, the above table indicates that the privilege is not being abused in our schools. My service in connection with the schools of Melrose began August 1, 1898. Since January 1, 1899, I have had kept a careful record of all cases of corporal punishment in the schools. Table XV shows the number of such cases that occurred and the number of teachers reporting the same during the first six months of which a record was

kept, also the corresponding record for a similar period of the school year ending June, 1901. These records show that from 1899 to 1901 for the corresponding periods of time the number of cases of corporal punishment in the schools has decreased 65%, while the number of different teachers reporting the cases has decreased 45%. These figures are significant, it seems to me, of an improvement in the spirit that dominates in the school room today over that which prevailed formerly. It is gratifying, also, to report that this decrease in the amount of corporal punishment has not in any way impaired the discipline of the schools. On the contrary there has been no time since my connection with the schools when, in the best sense of the term, the spirit of obedience and co-operation on the part of pupils has been on the whole, readier or more hearty than it is today.

THE HIGH SCHOOL.

The following statements contain information that is valuable to one who is interested to study this portion of our school system.

I. *Regarding Attendance:* (a) The following table shows the maximum number of pupils registered in the High School in September of each of the years during which I have been connected with the schools of Melrose.

YEAR.	Fourth Class.	Third Class.	Juniors.	Seniors.	Post Graduates.	Total.
1898.....	76	62	59	29	6	232
1899.....	88	59	47	46	7	247
1900.....	116	61	50	40	9	276
1901.....	119	95	58	44	9	325

The above figures show that the registration at the opening of the present school year was 40% greater than at the

corresponding period four years ago. It is interesting, also, to note the ratio of increase from year to year during this period. In September, 1899, the registration was $6\frac{1}{2}\%$ greater than in September, 1898; in 1900 it was practically 12% greater than in 1899, and in 1901 it was approximately 18% greater than in 1900.

This steadily increasing ratio of yearly increase in the registration of this school seems to me significant. Undoubtedly various factors have contributed to this result and, in my judgment, it is a reasonable inference from the above facts that, as our High School is conducted today, it is increasingly meeting the needs of our young people as those needs are estimated by fathers and mothers.

In any study of our school expenditure for the past few years, one must not lose sight of this rapid increase in the attendance upon the High School. While such an increase should be gratifying to one who has the best interests of the city at heart, it nevertheless serves not only to increase the total school expenditure more rapidly than would otherwise be the case, but, inasmuch as high school education is relatively costly, it forces up the per capita cost throughout the city.

Another point that should not be overlooked in this connection is the ratio of our High School enrollment to the total school enrollment for the city. Statistics show that this ratio for Melrose is practically 12%. In Everett the corresponding ratio is $5\frac{1}{2}\%$; in Chelsea, 7%; in Malden, $7\frac{1}{2}\%$; in Lynn, 8%; in Somerville, 8%; in Cambridge, $8\frac{1}{2}\%$; and in Medford, 10%. The average for the foregoing seven cities is approximately 8%. It appears, therefore, that Melrose has in its High School 4% more of its total school enrollment than the average in a similar line for the seven above mentioned neighboring cities.

While this fact tends, obviously, to increase the per capita cost for education in the city, it is well to bear in mind that from a broad point of view it means much to the prosperity of a community to have a high standard of educated intelligence prevailing.

(b) An interesting fact to note in connection with this school is the decrease in the annual loss of pupils from the three lower classes during the past three years. Computation based on the foregoing table reveals that during the period from September, 1898, to September, 1899, 23% of these classes severed their connection with the school; from September, 1899, to September, 1900, 22%; and from September, 1900, to September, 1901, 13%.

This steady decrease in the per cent. of annual loss from the membership of the school is due largely, in my judgment, to the well-directed efforts of the principal to conduct the school so that pupils of moderate ability or indifferent intentions educationally may be encouraged to continue their work in the school as long as possible.

Two antagonistic ideas prevail in the administration of public high schools. One assumes that a pupil who does not easily perform the school tasks, and who does not promise to do credit to the school should be encouraged to end his school days in the early part of his course; the other assumes that it is the duty of high school teachers, as it is of teachers everywhere, to do everything within their power to encourage even the most indifferent student to definite purpose, reasonable acquisition, and the continuation of his course.

The first conception, which has prevailed too largely in the past, is held today by a diminishing number of high school teachers of the old school. The second conception which is coming to prevail in the best school systems, I am

pleased to say is being carried into effect, as a rule, in our school with the result indicated above.

II. *Regarding Graduates:* Of the forty-one pupils who graduated in June, 1901, six are taking courses in College, three in the Massachusetts Institute of Technology, three in Normal schools, five are doing post-graduate work in the High School, four are at home, and twenty have entered upon a business career.

The uniformly excellent standing of our graduates in higher institutions of learning speaks well for the thoroughness of the work that is being done in the High School.

III. *Regarding Commercial Work:* Statistics regarding the last two graduating classes of this school reveal that 43% of the class of 1900, and nearly 50% of the class of 1901, passed directly into what may be termed business life. Records show, also, that, during the time that commercial work has had a place in our High School, an average of 62% of the pupils have taken more or less of the commercial work. During the present year, notwithstanding the fact that penmanship has been abolished as part of the work scheduled for the two lower classes, nearly 46% of the pupils are taking some of the distinctively commercial work. When one remembers that, with the exception of English, the studies that a pupil takes in our High School are elective, the above figures would seem to indicate that the introduction of commercial subjects into the school work meets a need of our young people.

One hears it occasionally said that commercial work has no place in High Schools. I am inclined to think that those of our citizens who have assumed this attitude with relation to our local High School fail to understand two things, (1) the facts regarding the demand for commercial training on the part of young people, and (2) the arrange-

ment regarding such training in our school. Therefore, a brief exposition of what we are attempting may not be out of place.

As I have previously suggested, the elective system prevails in our High School. With the exception of English, which every pupil is required to take throughout the four years, a pupil, guided by the advice of the principal of the school and with the written approval of his parents, is permitted to select his list of subjects for the year's work. Obviously, therefore, there is no such thing as a commercial course in the school in the ordinary sense of that term. There is a general course of study which schedules for each year a list of studies from which pupils must select enough to enable each pupil to have at least 16 periods of prepared recitations each week. Selection is confined to the studies scheduled for the class in which the pupil is and to the studies of previous years. In the arrangement of the course of study, the commercial work is scattered through the four years, so that, if one takes the maximum of commercial work for each year it is only possible for him during the first two years of his course to make up 3-16 of his program from the commercial work, and during the last two years to make up 11-16 of his program from commercial work. It is evident, therefore, that it is not possible, by any combination, for a pupil to get more than 7-16 of his work throughout his course from the special commercial studies. Such a course of study must have a large educational value, which, to my mind, removes the objection that can be justly made to short commercial courses designed to fit pupils for office work as quickly as possible.

The purpose in the Melrose High School is not simply to train for proficiency in office routine, but to give pupils a good general education and at the same time a comprehen-

sive business training; and, as the Commercial department in our school has been conducted thus far the work that has been done in it ranks well in educational value with that done in any other department in the school.

IV. *Regarding the Choice of Studies:* The following table shows the number of pupils at present registered in the different lines of study in the school and is interesting in view of the fact that the elective system prevails in the choice of lines of work. In studying the table, it should be borne in mind (1) that German, Greek, and Science are open only to the three upper classes, and (2) that Stenography, Typewriting, Book-keeping, and Penmanship are open only to the two upper classes.

LINES OF STUDY.	CLASSES.					Totals.
	Fourth.	Third.	Junior.	Senior.	Post Graduate.	
English	107	87	53	43	8	298
History	83	38	22	27	1	171
Mathematics	102	45	25	10	1	173
Book-Keeping .....	.....	.....	13	8	1	22
Science .....	.....	53	22	16	1	92
Latin	57	39	21	14	1	132
Greek .....	.....	12	6	9	1	28
German.....	.....	16	22	11	2	51
French	39	50	30	30	1	150
Stenography .....	.....	.....	15	18	2	35
Typewriting .....	.....	.....	15	18	2	35
Penmanship .....	.....	.....	13	8	1	22
Music	67	47	22	18	4	158
Drawing	62	41	9	12	.....	124

V. The following table gives the total and the per capita cost for the different items of expenditure in connection with the High School for the past two years.

EXPENDITURES FOR HIGH SCHOOL.

A. GENERAL STATEMENT.

ITEMS.	1900		1901	
	Expenditures.	Per cent. of Expenditures for all schools	Expenditures.	Per cent. of Expenditures for all schools
Salaries, teachers, janitor, engineer..	\$14,313.33	24	\$14,202.50	23
Books and supplies	2,105.98	41	1,716.44	30
Fuel	1,428.17	20	1,800.51	24
Sundries	340.93	19	409.33	27
High school library .....	.....	.....	79.61	.....
Total for support of school.....	18,188.41	.....	\$18,208.39	.....
Repairs and permanent improvements	320.66	12	591.20	16
Total for all purposes	\$18,509.07	24	\$18,799.59	23

B. PER CAPITA COST.

Based on average membership for financial year, 278.74.

	1900	1901
Salaries, teachers, janitor, engineer.....	\$57.19	\$50.95
Books and supplies	8.42	6.16
Fuel	5.71	6.46
Sundries	1.36	1.47
Repairs and permanent improvements	1.28	2.12
Library .....	.....	.28
Total for all purposes.....	\$73.96	\$67.44

One who notes the fact revealed in the above table that, in 1900, 24% of the total salary expenditure of the school department and 41% of the total outlay for books and supplies for all the schools of the city were expended for this school can hardly escape the feeling, as I suggested in my last report, that the cost of our High School is abnormally high, in spite of many excellent reasons therefor.

I feel certain that no one appreciates this condition better than the school authorities, and the closest economy, consistent with reasonable efficiency and with existing obligations, has been exercised regarding the expenditure for this

school during the past year with the result that there has been a reduction of 1% in the proportion of the total school expenditure that is devoted to this school and a reduction of 9% in its average per capita cost.

Part of this reduction is due to an increase of 6% in the average membership of the school during the year.

With the same rigid scrutiny of the expenditure for the school that has been exercised during this past year and with the increase of membership that we have reason to expect, it is probable that the per capita cost of the school may be still further reduced during the present year without impairing its efficiency.

THE KINDERGARTEN PROBLEM.

At the opening of the school year in September, 1901, a significant change was made in the character of the work done in the first grade in our schools, so that, at a very slightly increased expense, all children in the first grades throughout the city, excepting the few who are in our two mixed schools—the Ripley and the Converse,—are receiving practically as much kindergarten training as was formerly given to about 40% of those who entered that grade. This result has been brought about (1) by discontinuing the few kindergartens that it had been possible to maintain as separate and distinct institutions in the city, (2) by making the program of work in grade one a combination of the kindergarten and the easier portions of the first grade work, (3) by placing two teachers in each first grade room,—one a trained kindergartener, the other a regular first grade teacher—and (4) by admitting to such work no child unless he is either five years old or will attain that age before the first of January following his admission in September.

In December, 1900, when our kindergarten work was being done in separate schools, 132 pupils were being given the advantages of the kindergarten training. In December, 1901, after the above indicated change had gone into effect, 356 pupils were receiving kindergarten training, although in attendance upon what is nominally a first grade.

In the Melrose Journal for December 27, 1901, the following statements occur in an editorial on "The Kindergarten:" "The kindergartens in Melrose have not been extended to the extent that earnest friends of the system had hoped. . . The friends of the kindergarten hope that the coming year will see the work somewhat extended and especially in the sections where many little children need especially the kindergarten training. . . . There is a feeling that the School Committee is inclined to favor the higher grades at the expense of the kindergartens, where the money is not sufficient for all."

In view of the facts in this matter, the feeling expressed in the foregoing editorial statements can be accounted for only on the supposition that more or less of our citizens fail to understand not only the attitude of the school officials toward kindergarten work but also what is actually being done at the present time in our schools in this line. Therefore it may be wise to treat this subject somewhat fully.

And, first, let it be understood by all that the Superintendent of Schools and the School Committee of Melrose thoroughly believe in the desirability of kindergarten training and stand committed to do all that seems wise in view of prevailing conditions to secure the benefit of such training not simply to a portion of our pupils, but to all children in every section of the city.

At no time during the five years that kindergartens had been established in Melrose previous to September, 1901,

had more than 44% of the children who entered the first grades received kindergarten instruction.

Now, as I suggested in my last annual report, such a condition as a result of which more than half of the pupils in grade I were getting no advantage from the expenditure for kindergartens was far from satisfactory, and presented a problem that the committee should carefully study.

There seemed only two solutions to the problem. One was to establish independent kindergartens enough to supply all pupils with kindergarten training previous to their entrance into grade I; the other was to merge kindergarten work into our first grades in such a way that all pupils should be reached in that way.

In view of the fact that the school expenditure was practically 30% of the total tax levy of the city and that this expenditure could not be materially lessened if the schools were to be kept at a point of efficiency satisfactory to our citizens, and also in consideration of the fact that to supply the necessary rooms, teachers, and equipment to enable all children who enter grade I to have had a year's training in the kindergarten work, if these schools were to be kept separate and distinct institutions, would require upon the most conservative estimate from \$5,000 to \$6,000 additional annual expenditure, the first solution did not seem feasible.

To those who were anxious to make it possible for *all* the children in our schools to have the advantage of kindergarten training, it seemed wiser to study the feasibility of merging the kindergarten work in some way into the first grades. Conditions making it possible, an experiment in this line was tried in one of our first grades for a portion of the school year beginning September, 1900. Two teachers were placed in this grade—one a regular first grade teacher, the other a kindergarten teacher—and the entire work of the

grade was changed to correspond to the idea underlying the trial.

Notwithstanding the fact that this was pioneer work, the experiment was sufficiently successful to warrant the belief that the plan was practicable.

Owing to the fact that few of the children in this grade were under five years of age, it was found possible for the kindergarten teacher to accomplish with them practically the program of work outlined by the Supervisor of kindergartens in Boston for use in the kindergartens of that city in addition to the easier features of the primary work that the primary teacher did with them

After this experiment had been in operation for six months, I submitted the following questions to the teacher who had charge of the kindergarten work in the above mentioned grade :

I. Do you think that the experiment of combining kindergarten with first grade work which has been tried in your room during the present year is a practicable plan to be adopted for the first grades throughout the city ?

II. Do you think such a plan, if carefully developed and carried out, would benefit the pupils who enter our first grades more than the present plan of work for that grade ?

III. Do you consider such a plan better for the school interests of the city than to have 50% of the children who enter the first grade receive training for a year in a distinct kindergarten school and the remaining 50% enter without any such training?

The answers given in the order in which the questions were put are as follows: (1) I do. (2) Yes. (3) Yes.

At this point the problem was referred to the sub-committee on kindergartens for further investigation and report.

After a careful study of the subject in all its bearings, the

following unanimous report was submitted to the full committee for consideration:

REPORT OF SUB-COMMITTEE ON KINDERGARTEN.

The Committee on Kindergarten, after due consideration and with a view to the greater efficiency of that branch of our educational system, desire to offer the following suggestions:

First—It is a well-known fact that, as now conducted, the advantage of the kindergarten work is (unavoidably) unevenly distributed, and entirely inadequate to a realization of results which the theory of such teaching warrants us to expect.

Second—Requiring, as we do, more room and better accommodations for our advanced grades,—which by law we must supply,—we are powerless, with our present school buildings, to furnish rooms for more kindergarten work, (or in fact to continue all we now have), even if our appropriation was sufficient to cover the extra expense involved for teachers and supplies. That it does not do this requires no argument.

Third—Less than one-third of our children do, or can, avail themselves of the advantages of kindergarten work. The remaining two-thirds, consequently, start in their school course relatively handicapped from lack of such preliminary preparation for the work of the first grade, and a majority of them continue handicapped longer, perhaps, than we realize.

Confronted with these facts and believing that it is the desire of our citizens, that in our public school system no discrimination or favoritism should be shown to locality or condition, but that all should share alike the benefit of the

kindergarten, which in a modified form, we consider almost indispensable, we submit the following plan of consolidation outlined by the Superintendent which, when perfected and adopted, we firmly believe will tend to the mutual advantage of every scholar entering the first grade.

GEORGE H. HILL,
EDWARD B. MARSH,
BESSIE B. DEARBORN,
Committee on Kindergarten.

April 9th 1901.

In accordance with the above report, it was voted that at the opening of the schools in September the Superintendent of Schools should organize each of the first grades in the city (the Ripley and Converse schools excepted for obvious reasons) along the line of the suggestions presented in his last year's report. This was done, and today, with the exception of the two mixed schools above mentioned, every first grade in the city is a modified kindergarten in which, when the plan of work has been carefully worked out through experience, all of our pupils will receive practically as much kindergarten training as 2-5 formerly received.

It is too early to point to results as a justification of the wisdom of the above arrangement; but it may be said that the kindergarten teachers with hardly an exception feel that the plan is working better than they had expected, although, all things considered, they had indorsed the wisdom of the move at the start.

For my own part, the confidence with which I recommended the change has been strengthened by the character of the work that is being done, and I firmly believe that, so far as the interests of the whole city are concerned, more is

being done today for our children in the line of kindergarten training than has ever been done before or could be done under previous conditions. For, in spite of the easy going statement that one occasionally hears to the effect that Melrose is able and willing to pay for independent kindergartens enough for all, I believe that the logic of things, when we look our school expenditure and our school needs squarely in the face, as well as the experience of nearly all places in which kindergartens exist, is sufficient to convince any cool headed individual that Melrose neither could nor would afford to maintain enough independent kindergartens to give all pupils the advantage of such training.

It is not alone from the kindergarten standpoint that the change in our first grades is a benefit. The thought that I have in this connection was expressed in my last report in the following words: "It will be readily admitted, I think, by any one who is familiar with public school work that it is impossible for one teacher to handle thirty or forty pupils in a first grade as they ought to be handled to secure anything like the results that are possible for children taught under proper conditions. In my judgment, the assignment of one teacher to a first grade of that size results in a waste of at least one-half of the pupil's time in the school. Pupils from five to six years of age are incapable of using their time advantageously in school work without constant supervision. However carefully a teacher may arrange 'busy work' for those children who are awaiting their period for recitation work with the teacher, children, in the main, secure from such work little more than amusement if left to themselves. Therefore, if educational results are the primary consideration in the organization of the schools, wise economy would seem to dictate that two teachers be

assigned to every first grade for all or part of the time at least. This result would be secured if the plan suggested for the combination of kindergarten and first grade work should be adopted in our schools."

Now the desired result suggested in the foregoing quotation has been secured through the present organization of the work of our first grades, as well as a much needed modification of the severity of the program of first grade work as formerly carried on.

GRAMMAR SCHOOL DIPLOMAS.

During the year it was voted upon recommendation of the Sub-Committee on Rules and Regulations that no diplomas or certificates be granted pupils upon the completion of the work of the ninth grade. This action carried with it, naturally, the abolition of graduation exercises at the close of the grammar school course.

The public school system is a unit from the kindergarten grade to the close of the high school course, and it was the feeling of the Committee that the pupils in our schools should be impressed with this fact as far as possible, and that the schools should be so administered that the transition from grade nine to grade ten (the first year in the high school) should appear to the pupils as natural as the transition from any grade to another in the system. It was felt that graduation exercises and the granting of diplomas at the end of the ninth grade tended to perpetuate a gap between the grammar school and the high school which, in the interest of the school system, should not exist.

Because this gap has existed in popular thought too long already, I believe that many pupils have closed their school days with the grammar schools who might and, otherwise, would have gone further.

Another fact influenced the Committee in its decision in this matter. It was felt, also, that graduation exercises put upon many parents an unnecessary financial burden in the way of expenditure for clothes, flowers, class-pictures, etc., which they could not afford to bear; and it was understood that there had been pupils who had left school before the completion of their grammar course because their parents were unable to bear the expense necessary to enable the pupils to compare favorably with their mates in the above lines at the graduation season.

Therefore, in the interest of the schools and of those of our citizens who may be in moderate financial circumstances, it has seemed best to the Committee not to grant diplomas to pupils until the completion of the full public school course; and it is my opinion that careful thought on the subject will convince the public that the Committee acted wisely.

SCHOOL EXHIBIT.

For the past few years public visitation days have been set apart near the close of the school year to enable parents and all interested in the schools to study the character of the work that is being done in the schools, both through the observation of classes at their regular work, and through an examination of specimens of the written work of the pupils.

During the school years ending in June, 1899, and 1900, these exhibitions were held at the respective school buildings. In June, 1901, an exhibit of work from all the schools in the city was massed in the high school building. This exhibit embraced work in nearly every line of study that is pursued in the schools and contained specimens from every pupil. It was open to the public during two afternoons and evenings and the work was viewed by thousands of our citizens and many from other towns and cities.

During both evenings, classes in music and physical training gave exhibitions of the character of the work done in these lines in the schools.

From the frequent expressions of surprise and pleasure that were heard during the exhibit, I feel confident that the public, as a whole, has a higher conception than formerly of what modern education means and of what can be accomplished in our schools under favorable conditions in the various lines of study. I feel, also, that pupils come to put a higher valuation upon the work in which they are engaged as a result of such exhibitions.

MUSIC.

The work in this line has been somewhat interrupted during the year by a change of supervisors. Mr. Grant Drake, who had held the position of Supervisor of Music in the schools for the past ten years, was elected early in the fall director of music in the high schools of Boston. Mr. Drake's work in Melrose had attracted wide and favorable attention and it was with much regret that I found myself compelled to transmit his resignation to the Committee. Mr. Alvin C. Saunders, who was chosen as Mr. Drake's successor, is a man who has had wide and successful experience as a supervisor of public school music, who is thoroughly devoted to his work, who is enthusiastic and untiring in his efforts, and one who has the happy faculty of winning the hearty co-operation of the children as a rule, as well as of his associates.

With the above characteristics one can hardly fail in such a position, and I feel confident that under the direction of Mr. Saunders the work in music in our schools will be kept up to the point of efficiency to which it had been raised under the direction of Mr. Drake.

For further information regarding the work in this line I submit the following report by Mr. Saunders.

REPORT OF SUPERVISOR OF MUSIC.

MR. F. H. NICKERSON, Superintendent of Schools:

Having so recently been elected to the position of Supervisor of Music in your public schools, I am unable to give an extended report at the present time. The plan of work as commenced by the former Supervisor will be carried out with as little change as possible. It is a great pleasure to take up work where pupils have been so carefully trained, music so intelligently taught, and where all grades are so well provided with material.

The Natural Music Course has been designed to enable the pupils of our public schools to master technical music at sight and to render it well and artistically. As in learning to speak the child imitates the words of his mother, so in learning to sing he begins by imitating the sounds as sung by the teacher. This comes first in songs, second in the scale as a unit, and, as soon as the child can sing the scale by rote, the representation is given and he soon ceases to imitate and begins to think for himself. In the first grade more than fifty songs are learned and the first chart completed as technical study. No child is allowed to sing in a loud or unmusical manner. This plan has been adopted throughout all the grades and the pupils in the upper grades are able to sing in a most pleasing manner.

The outline for work in the different grades is as follows;

First—Chart A—Oral dictation—Fifty songs.

Second—Chart B—Oral and written dictation—Music primer, first forty-eight pages, review rote songs already learned and add many new ones.

Third—Chart C—Last half of primer including all two part exercises and songs, oral and written dictation.

Fourth—Chart D—Reader No. 1, including vocal drills, Major and Minor scales, oral and written dictation.

Fifth—Chart E—Reader No. 2, rapid vocal drills, melodic, harmonic and normal minor scales, oral and written dictation.

Sixth—Chart F—Reader No. 3.

Seventh—Chart G—Reader No. 4.

Eighth—Chart G—Reader No. 5, part 1.

Ninth—Chart G—Reader No. 5, part 2.

The vocal drills and dictation are continued throughout all the grades. The pupils in the High School are studying Longfellow's beautiful poem, "The Wreck of the Hesperus," so admirably set to music by Anderton.

The members of the Glee Club are doing good work, but they are few in number.

A normal class for teachers has been organized, meetings to be held weekly for ten weeks. At these meetings a special study of the charts is taken up, also dictation and three part singing. So far, these meetings have been very helpful to the teachers and have been well attended. Many of the teachers have become so interested that they are studying diligently at home, anxious to prepare themselves to be better teachers of music. It is the firm belief of most supervisors that the way to improve music in our schools is to train the teachers.

I take this opportunity of thanking the teachers for their hearty co-operation, also the Superintendent and members of the School Board.

Respectfully submitted,

ALVIN C. SAUNDERS.

DRAWING.

The work that is done in our schools under this general heading still remains under the direction of Mr. Carter, and I would respectfully refer the Committee to the following report by him for further information regarding what has been attempted in this line of effort during the past year.

MR. F. H. NICKERSON, Superintendent of Schools:

I send you the following report of Drawing in the Melrose schools for the year 1901.

The plan of work is practically along the same line as in previous years, except that we are using the lead pencil more as a medium for spray and object work. For all such purposes the pencil is the best medium unless we wish to save the work or use it for an illustration, in which case we use pen and ink.

In writing this report it seemed to me a good plan to give the public a general idea of the work as carried on in our public schools, and so I have outlined the following:

During the months of September and October we work with color, using it in color schemes and for color analysis and harmonies. Besides this we have nature sketching with ink, and brush and color.

For November and December our time is spent in freehand, object and model work, using pencil; also composition and landscapes.

During January, February and March we are busy with combinations of geometric figures, grills, vase forms, etc., and constructive design.

April, May and June we have decorative design, adaptation of natural forms to produce decorative units, application of original work in design, and nature drawing of the early twigs, birds, moths and flowers.

In connection with all the year's work the children are taught to appreciate all that is beautiful in art and nature.

For this course we are allowed one hour a week divided into twenty-minute periods for primary grades and half-hour periods in the grammar grades, excepting in the ninth grade where the full hour is spent in one lesson because the work is such that more can be gained in that way than in two half-hour lessons.

This plan of work is practically the same as the leading art teachers in other cities throughout the state are using.

The work in the schools shows good progress, and is steadily improving in quality. We have a number of new teachers this year to whom the work is new, but the interest they show in their work will surely make it a success.

In closing I thank the teachers for their co-operation in the work and the Superintendent and Committee for the courtesies received from them.

Respectfully submitted,

WILLIS S. CARTER.

IMPROVEMENT OF SCHOOL PROPERTY.

In line with its policy to place the school buildings and school grounds in first-class condition as rapidly as the finances will permit, the Committee has made considerable improvement on the school property during the year. In addition to the ordinary repairs the following are the larger improvements that have been made during the year. At

the Franklin School the closets which were in bad condition have been thoroughly repaired, new foundations have been placed under the front steps which had gradually settled and fallen away from the building, the sinks which had been a nuisance in the corridors have been changed to a less conspicuous position, the corridors and closets have been wainscoted, and the walls and ceilings throughout the building have been repaired and tinted, excepting those of the class rooms, and it is hoped that these may be similarly treated at an early date.

When this work has been completed, that building will be in first-class condition for the first time,— the limited appropriation at the command of the building committee at the time of its erection having prevented the completion of many details as planned.

At the Washington School, serious structural weakness developed during the year in the floors and roof of the building, and the committee was under the immediate necessity of practically re-trussing the roof and central partitions. This work was done in such a manner that the building is now considered entirely safe.

At the Whittier School, the porch which had become sadly decayed was rebuilt.

At the Mary A. Livermore School, the stone foundation was repaired, and an endeavor was made to secure more satisfactory conditions with respect to the light supply in dull weather by changing the coloring of the walls and ceiling in the class rooms and by the use of the mill ribbed glass now much employed when large spaces are illuminated from side walls.

During the past three years, in addition to the work on the above mentioned buildings, the Converse, Winthrop, and D. W. Gooch school buildings have been put in thorough

repair, and the corridors and two rooms of the Sewall School have been renovated.

In refinishing the interiors of the buildings, such colors have been used on walls and ceilings as specialists consider conducive to the comfort and preservation of the eyes of the pupils.

It had been hoped that the Horace Mann and Whittier buildings might be protected during the coming summer by new coats of paint and some other needed external repairs, but an insufficient appropriation for repairs will not warrant undertaking that work during the present year.

For some time there has been need of making more or less repairs upon the Warren building. Little money, however, has been expended upon this building for several years for the reason that very soon an addition must be made to the building for the accommodation of new and modern closets and it has not seemed wise to make more than the minor repairs that were absolutely necessary, until the above mentioned addition should be made, in order that the entire work might be done at the same time.

In addition to what has been done upon buildings during the year, the grounds about the Washington School have been considerably improved through the efforts of a committee of ladies who are interested in the school, and the grounds about the D. W. Gooch School have been graded and planted with shrubbery through the joint efforts of the Committee and some of our energetic and generous citizens who are interested in that school.

From the foregoing statements it will be seen that the school property of the city is fast being placed in excellent condition; and there is reason to expect that, if the Committee is granted fairly liberal appropriations for repairs for one or two years more, the annual expenditure in this line will be materially decreased.

CONCLUSION.

Within the limits of a single report one can hardly do more than indicate in a general way the trend of the effort and accomplishment of a school system for the period of a year; and that is all that I have attempted in the foregoing report. I feel, however, that enough has been said to enable one who reads it thoughtfully to find ample proof that, on the whole, the schools of Melrose are steadily becoming more efficient.

As I view it, this result has been made possible (1) by a citizenship that is thoroughly loyal to public school interests, (2) by a progressive and self-sacrificing School Committee, and (3) by an earnest and hard-working corps of teachers who have co-operated heartily with the efforts of the Superintendent of Schools.

So long as the above conditions prevail the welfare of our schools is assured.

Respectfully submitted,

F. H. NICKERSON,

Superintendent of Schools.

April 26, 1902.

APPENDIX.

- a.* PROGRAM OF HIGH SCHOOL GRADUATION.
- b.* FRANKLIN FRATERNITY PRIZES.
- c.* MELROSE WOMAN'S CLUB HONORS.
- d.* PUPILS PROMOTED FROM THE NINTH GRADE
TO THE HIGH SCHOOL, JUNE, 1901.
- e.* ORGANIZATION OF THE SCHOOL STAFF.

MELROSE HIGH SCHOOL.

GRADUATING EXERCISES.

CLASS OF 1901.

CITY HALL, EVENING OF JUNE TWENTY-SIXTH, AT EIGHT O'CLOCK.

PROGRAM.

INVOCATION,

REV. THOMAS SIMS, D. D.

"THE SHEPHERD LADY," *Armstrong*

GLEE CLUB.

ADDRESS, "The Trend of the Twentieth Century,"

MRS. MARY A. LIVERMORE.

"MORN RISE," *Czibulka*

GLEE CLUB.

AWARD OF PRIZES GIVEN BY THE FRANKLIN FRATERNITY.

a. "LULLABY," *Emerson*

b. "TALLY-HO," *Roeckel*

GLEE CLUB.

PRESENTATION OF DIPLOMAS,

WILLIAM D. STEWART, CHAIRMAN SCHOOL COMMITTEE.

"CHING-A-RING-A-RING," *Molloy*

GLEE CLUB.

CLASS OF 1901.

"He Conquers Who Conquers Himself."

Bates, Elsie Maroy	Mitchell, Evelyn Louise
Bayard, Carl Henry	Moore, Irma Agnes
Beeler, Howard Allan	Ormsby, Edith Marie
Brickett, Blanche Merrill	Powell, Harold Grinnell
Burgess, Roswell Nye	Reeves, James Arthur
Clark, Mabel Gertrude	Rowe, Augusta Maude
Cornwall, Marion Frances	Sawyer, Carleton Alfred
Faust, Mary Ellen	Sawyer, Helen Blanche
Gilkey, Lillian Maybelle	Serra, Rhoda Pearl
Hatch, Marion Louise	Shepard, Walter Llewellyn
Holmes, Mae Ransom	Small, Arthur Everett
King, Arthur Dodge	Smith, Ward Cotton
Larrabee, Sarah Helen	Spooner, Anna Caroline
Leighton, Marion Chadwick	Steele, Lena Marion
Lovell, Howard Burt	Thompson, Irene Florence
Luce, Robert Francis	Toomy, Annie Frances
MacBriar, Wallace Noble	Welden, Grace Curtis
Mayo, Gertrude Crowell	Whitney, Helen Bradford
McConnell, Gertrude Rose	Woodman, Bessie Florence
Merrill, Charles Edward, Jr.	Wyman, Lena Hannah

CLASS HONORS.

Blanche Merrill Brickett. Marion Chadwick Leighton.

HONOR LIST.

CLASS OF 1901.

Howard A. Beeler.	Wallace N. MacBriar.
James A. Reeves.	Arthur E. Small.
Mary E. Faust.	

CLASS OF 1902.

Emma B. Bowden.	Cora E. Hopkins.
Arthur B. Marsh.	Harold A. Whitman.
John H. Cunningham.	

CLASS OF 1903.

Stella M. Durrell.

Marguerite E. Hill.

Philip L. Gile.

Mary H. Slade.

Nina A. Adams.

CLASS OF 1904.

Florence M. Child.

Marion H. Stafford.

Leigh N. Vaughn.

Caroline G. Whitney.

Ethel G. Gould.

FRANKLIN FRATERNITY PRIZES, JUNE, 1901.

MATHEMATICS.

Robert F. Luce, 1901.

John H. Cunningham, 1902.

Jules V. Barnd, 1903.

Ethel G. Gould, 1904.

ENGLISH.

Arthur E. Small, 1901.

Aimee E. Spurr, 1902.

Lillian Holden, 1903.

Caroline G. Whitney, 1904.

MELROSE WOMAN'S CLUB HONORS.

Marion Chadwick Leighton.

Marion Louise Hatch.

PUPILS PROMOTED FROM THE NINTH GRADE TO
HIGH SCHOOL, JUNE, 1901.

*Florence E. Ackerman	Iva M. Fitch
*Marietta B. Adams	*George A. Folger
*Harold Aldrich	*Reginald Fonda
Fred A. Allen, Jr.	*Hazel B. Fowler
*Amy M. Anderson	*Isabelle Franklin
*Dora Anderton	*Martha Frederick
*Alick J. Balczó	*Robert G. S. Furlong
*Lawrence K. Batchelder	*Howard Gilbride
*Charles E. Bent	George E. Gilkey
*Albert Beshong	*Flora Goodno
*Florence M. Boutwell	*Ruth P. Goodno
Elizabeth C. Brady	*William H. Gower
*Grace D. Bridgewater	*John C. Grant
*Flora E. Brown	James D. Griffin
*Charles R. Calkins	Marie A. Grottendick
*James E. Case	*Elizabeth M. Grundy
*Guy F. Carleton	*Florence C. Haley
Walter E. Carruthers	*Amy G. Hamilton
*E. Greeley Clark	*Edwin A. Harris
*Frank O. Cleveland	*Mary C. Hawkes
*Herbert L. Cleveland	*Irene A. Henney
*Albert H. Cochrane	*Marion Hewens
*Walter H. Colby.	*Charles A. Hill
*Mary F. Conway	Edward J. Hickey, Jr.
*Florence W. Cooper	*Mark S. Holmes
*F. Ernest Cowdrey.	*Olive M. Houghton
*Florence Curry	*Harold G. Hubbard
*Frank W. Curry	Margaret Hunter
*Bertha S. Davis	*Olive Irving
*Mary E. Doherty	*Mary N. B. Johnson
Sarah E. Duff	*Oscar L. Johnson
Elizabeth C. Dwyer	*Richard A. Kidder
*John J. Dwyer	*Robert R. Kitching
*Maud D. Emerson	*Harold M. Libby
*May A. Finn	*Richard Lord
*Mary E. Fisher	*Marguerite Loring

*Beatrice Lovejoy
*Louis R. Lovejoy
Alexander MacLachlan
*Mary Mahoney
*Emily McConnell
*Lucy W. McFarlin
Wm. R. McQuinn
*Florence M. Merrill
*Augustus B. Merry
*Frances D. Mont
*Annie B. Murray
*Harold L. Nash
*Blanche E. O'Brien
*Winslow G. Ormsby
*Everett A. Pease
*L. Edith Pickering
*Sadie A. Plaskett
*Wadsworth G. Provandie
*Violette L. Reeder
Elizabeth Reeves
*W. Carleton Rich
*Frederick W. Rink

Kendall Salisbury
*Josephine L. Schoonmaker
*Harold G. Sherman
*Rufus W. Smith, Jr.
*Harry E. Snow
*Elizabeth L. Snowden
*Helen A. Stevens
*Alice M. C. Spinney
George K. Stockwell
*William H. Stone
*George Thompson
*Marion E. Torrey
*Raymond S. Twombly
*Linwood S. VanAlstine
*Mabel A. VanRiper
*Austin L. Verge
*Edwin C. White
*Frank C. White
*Mabel F. Whitehead
*Elmer P. Whittredge
*Frank L. Willis
*C. Elmer Wilson, Jr.

*Entered High School in September. 86

ORGANIZATION OF THE SCHOOL STAFF.

December 31, 1901.

Superintendent of Schools.

FRED H. NICKERSON, 492 Lebanon Street.

Superintendent's Clerk.

HELEN L. BURR, 119 Wyoming Avenue.

CORPS OF TEACHERS.

HIGH SCHOOL.

NAME.	GRADE.	WHERE EDUCATED.	WHEN ELECTED.
William C. Whiting..	Principal.....	Dartmouth College	1899
Alouzo G. Whitman..	Prin. Emeritus..	Bowdoin College.....	1874
Everett H. Scott.....	Sub-Master....	Wesleyan University.....	1898
George A. Hutchins..	Science Dept..	Bates College.....	1901
Hugh G. Greene.....	Com'l Dept....	Albany Business College..	1898
Adelma A. Ballou....	Assistant.....	Dean Academy.....	1887
Harriet C. Fairbanks..	Assistant.....	Natick High School.....	1880
Annie C. Merritt.....	Assistant.....	Hanover (Germany) Normal School, Cours Sevigue, Paris.	1897
Hattie G. Ricker,....	Assistant.....	Lapham Institute.....	1884
Jeannette Moulton...	Assistant.....	Wellesley College.....	1899
Margaret McGill.....	Assistant.....	Mt. Holyoke College.....	1900
Helen M. Armstrong.	Assistant.....	Boston University	190

FRANKLIN SCHOOL, COR. FRANKLIN AND MAIN STS.

NAME.	GRADE	WHERE EDUCATED.	WHEN ELECTED.
Archer C. Bowen	Principal, IX	Bridgewater Normal School	1901
Mary J. George	Prin. Asst.	Wakefield, Mass. High School	1880
Imogene Conland	VIII	Boston University	1902
Louise G. White	VII	Salem Normal School	1895
Alice C. Day	VII & VI	Salem Normal School	1900
A. Pauline Ham	VI	Salem Normal School	1901
Nora P. Nason	V	Gorham (Me.) Normal School	1899
Alma J. Guptill	IV	Girls' High School, Boston	1884
Isabelle L. Atwood	III	Robinson Seminary, Haverhill Training School	1892

WASHINGTON SCHOOL, COR. LEBANON AND LYNDE STS.

William A. Reed	Principal, IX	Cook County Normal School	1901
Harriet H. Dowe	Prin. Asst.	Mt. Holyoke College	1898
Grace E. Chamberlain	VIII	Gorham (Me) Normal School	1901
Lavinia W. Smallwood	VI	Bridgewater Normal School	1899
Etta J. Call	V	Ellsworth, Kan., Normal Inst.	1890
Minnie F. C. Snow	IV	Orono (Me.) High School	1892
Mary L. Loring	III	Salem Normal School	1897
Hattie D. Field	II	Boston Normal School	1891
Mary A. Bailey	I	Miss Wheelock's Kindergarten Training Class	1896
Bertha W. Leighton	I	Miss Wheelock's Kindergarten Training Class	1899

LINCOLN SCHOOL, WYOMING AVENUE.

Augustus O. Burke	Principal, IX	Bridgewater Normal School	1898
Lydia Mendum	Prin. Asst.	Salem Normal School	1874
Cora S. Burleigh	Prin. Asst.	Farmington (Me.) Normal School	1900
Ethel E. Thomas	VII	Bridgewater Normal School	1901
Mary R. Clarke	VI	Franklin Academy	1894
Mary S. Haley	V	Framingham Normal School	1901
Harriet A. Saunders	IV	Malden High School	1898
Lena D. Marshall	III & II	Salem Normal School	1900
Jeannette A. Doane	I	Templeton High School	1895
Grace A. Lynde	I	Miss Page's Kinderg't'n Train- ing Class	1897

HORACE MANN SCHOOL, COR. GROVE AND MYRTLE STS.

NAME.	GRADE.	WHERE EDUCATED.	WHEN ELECTED.
Alice M. Swett.....	Principal, VIII.	Plymouth (N. H.) Normal School	1882
Mary S. Wentworth...	Prin. Asst.....	Wakefield (N. H.) Academy.	1896
Persis M. Sibley	VII.....	Gorham (Me) Normal School.	1902
Maud Nickerson	VI.....	Boston University.....	1897
A. Louise McCormick. V		Wheaton Seminary.....	1891
Anna W. Atkins	IV.....	Provincetown High School...	1897
Nellie C. Dempsey ...	III.....	Salem Normal School.....	1891
A. Arline* Merril.....	II.....	Melrose High School.....	1894
Annie G. Balch	I.....	Wakefield High School	1900
Lillian M. Tufts.....	I.....	Miss Symonds' Kindergarten Training Class.....	1901

D. W. GOOCH SCHOOL, COR. FOSTER AND FLORENCE STS.

Eva R. Crane	Principal, VIII.	Coburn Classical Institute...	1899
Helena L. Wright....	Prin. Asst.....	Castine Normal School.....	1901
Harriet Benson.....	VII.....	Gorham (Me.) Normal School.	1902
Alice H. Long.....	VI.....	Boston Normal School.....	1877
Lois M. Holmes.....	V.....	Melrose High School.....	1896
Mary E. Nye.....	IV.....	Bridgewater Normal School..	1885
Ethel E. Clark.	III.....	Salem Normal School.....	1900
Amelia F. Trowbridge	II.....	Melrose High School.....	1889
Annie P. Long.....	I.....	Melrose High School.....	1894
Maud E. Brown.....	I.....	Miss Garland's Training Class.	1900

MARY A. LIVERMORE SCHOOL, MAIN STREET.

Annie M. C. Washburn	Principal, VIII.	Wellesley College.....	1900
Florence E. Worthing.	Prin. Asst....	Coburn Classical Inst.....	1901
Naomi E. Stevens....	VII.....	Farmington (Me) Normal Sch'l	1899
Katherine V. Rowe..	VI.....	Boston Normal School.....	1901
Lucy E. Shute.....	V.....	Pinkerton Academy	1895

WARREN SCHOOL, WARREN STREET.

NAME.	GRADE.	WHERE EDUCATED.	WHEN ELECTED.
Alice J. Coffin.....	Prin. IV, V...	Gorham (Me.) Normal Sch'l..	1895
Florence E. Worthing.	Prin. Ass't....	Coburn Classical Institute....	1901
Mary E. Tupper.....	III.....	Framingham Normal Sch'l...	1892
Ruth M. Knowles....	II.....	Mt. Holyoke College.....	1894
Margaret E. Grady...	I.....	Salem Normal School.....	1896
Mabel Price.....	I.....	Miss Symonds' Kind. Tr. Cl...	1897

WINTHROP SCHOOL, COR. ELEVENTH AND FIRST STS.

Edith S. Dermot.....	Principal IV...	Framingham Normal School.	1896
Annie Dinnie.....	III	Quincy Training School.....	1900
Grace C. Albee.....	II	Wellesley College.....	1898
Bessie A. Chase.....	I	Boston University and Hyan- nis Normal School.....	1901
Helena M. Hocking..	I	Miss Wheelock's Kind. Tr. Cl.	1901

SEWALL SCHOOL, UPHAM STREET.

Martha A. Briggs....	Prin. IV, III...	Edw. Little High, Auburn...	1898
Mattie C. Mirfield....	Assistant.....	Salem Normal School.....	1901
Mary A. Chisholm...	II	Salem Normal School.....	1896
Geneva B. Davidson..	I	Miss Page's Kind. Tr. Cl....	1899
Emma C. French.....	I	Miss Symonds' Kind. Tr. Cl.	1902

WHITTIER SCHOOL, COR. FRANKLIN AND PRATT STS.

Archer C. Bowen.....	Principal.....	Bridgewater Normal School..	1901
Gertrude B. Stewart.	II	Melrose High School.....	1894
Frances B. Brown....	I	Exeter N. H. Tr. School.....	1899
Marion P. Goodwin..	I	Miss Symonds' Kind. Tr. Cl.	1901

CONVERSE SCHOOL, FELLOWS.

Anastatia G. Riley...	I, II, III.....	Salem Normal School.....	1900
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RIPLEY SCHOOL, SWAIN'S POND AVENUE.

Mabel C. Gilbride....	I, II, III.....	Quincy Training School.....	1900
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SUPERVISORS.

Alvin C. Saunders.....	Music.....	1901
Willis S. Carter.....	Drawing	1891

JANITORS.

NAME.	SCHOOL.	RESIDENCE.
George A. Beckford..	Ripley	Off Swain's Pond Avenue.
Charles Critchett....	Winthrop	80 Whitman Avenue.
James Fahey.....	Warren and Whittier....	62 School Street.
George E. Fogg.....	High	127 Upham Street.
Samuel Lear.....	Franklin	931 Main Street.
Henry S. Payne.....	Washington	28 Albion Street.
Thomas Ray	Converse.....	52 Main Street.
Charles H. Rogers....	Lincoln	2 Central Terrace.
John Thyng.....	Gooch and Mann.....	43 Winthrop Street.
Isaac C. Weeks.....	Livermore and Sewall..	22 Winthrop Street.

ENGINEER IN HIGH SCHOOL.

Charles Brown..... 50 Porter Street.

IN THE SCHOOL COMMITTEE,
MELROSE, April 26, 1902.

Voted, That the annual report of the Superintendent of Schools be accepted and printed as the report of the School Committee.

F. H. NICKERSON,
Recording Secretary.

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COLLECTOR'S REPORT.

To the Honorable Board of Aldermen, City of Melrose:

GENTLEMEN:—I herewith submit the second annual January report.

TAX 1901.

Warrant,	.	.	.	.	.	.	\$248,652 39
Additional,	.	.	.	.	.	.	718 95
Interest,	.	.	.	.	.	.	81 21
							\$249,452 55
Abatements,	.	.	.	.	.	.	3,630 58
							\$245,821 97
Paid treasurer,	.	.	.	.	.	.	130,396 15
Uncollected,	.	.	.	.	.	.	\$115,425 82

TAX 1900.

Warrant,	.	.	.	.	.	.	\$237,310 57
Additional,	.	.	.	.	.	.	2,398 90
Interest,	.	.	.	.	.	.	3,787 34
							\$243,496 81
Abatements,	.	.	.	.	.	.	4,915 07
							\$238,581 74
Paid treasurer,	.	.	.	.	.	.	229,261 26
Uncollected,							\$9,320 48

TAX 1899.

Warrant,	\$222,702 39
Additional,	1,640 76
Interest,	4,295 65
	\$228,638 80
Abatements,	5,188 94
	\$223,449 86
Paid treasurer,	222,678 25
Uncollected,	\$771 61

TAX 1898.

Warrant,	\$215,714 90
Additional,	1,243 81
Interest,	4,793 90
	\$221,752 61
Abatements,	4,184 06
	\$217,568 55
Paid treasurer,	217,511 54
Uncollected,	\$57 01

TAX 1897.

Balance of warrant,	\$221 63
Interest,	9 19
	\$230 82
Abatements,	172 01
	\$58 81
Paid treasurer,	58 81

TAX 1896.

Balance of warrant,	\$146 96
Interest,	8 06
	\$155 02
Abatements,	111 72
	\$43 30
Paid treasurer,	43 30

TAX 1895.

Balance of warrant,	\$47 66
Interest,	4 90
	\$52 56
Abatements,	31 70
	\$20 86
Paid treasurer,	20 86

WATER RATES 1901.

Collections,	\$46,851 85
Paid to treasurer,	\$46,559 96
Refunds,	280 74
	\$46,840 70
Balance,	11 15
	\$46,851 85

WATER RATES 1900.

Amount collected as per last report,	\$35,619 41
Collected 1901,	1,460 24
Amount carried forward,	\$37,079 65

COLLECTOR'S REPORT.

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Amount brought forward,		\$37,079 65
Paid to treasurer,	\$36,458 44	
Refunds,	621 21	
		\$37,079 65

SEWER ASSESSMENTS.

Collected as per last report,		\$88,191 68
Amount collected 1901,		12,612 95
Total collections,		\$100,804 63
Paid to treasurer,	\$100,768 19	
Balance,	36 44	
		\$100,804 63

STREET WATERING 1900.

Amount collected,		\$3,800 10
Paid to treasurer,	\$3,775 58	
Balance,	24 52	
		\$3,800 10

STREET WATERING 1899.

Total collected,		\$3,016 93
Paid to treasurer,		\$3,016 93

REDEMPTION OF 1900 TAKING.

Amount redeemed,		\$134 44
Paid to treasurer,		\$134 44

REDEMPTION OF 1899 TAKING.

Amount redeemed,		\$1,015 19
Paid to treasurer,		\$1,015 19

COLLECTOR'S REPORT.

REDEMPTION OF 1898 TAKING.

Amount as per last report,	\$1,218 95
Redeemed in 1901,	552 96
	\$1,771 91
Paid to treasurer,	\$1,771 91

SIDEWALK.

Collections 1899, 1900,	\$104 24
Paid to treasurer,	\$99 24
Balance,	5 00
	\$104 24

Respectfully,

JAMES W. MURRAY,
City Collector.

ASSESSORS' REPORT.

January 31, 1902.

Hon. John Larrabee, Mayor of the City of Melrose:

DEAR SIR: The Board of Assessors herewith submit their report for the year ending January 31, 1902.

VALUATION OF THE CITY.

Buildings,	\$7,610,850 00	
Land,	5,993,025 00	
Total real estate,		\$13,603,875 00
Personal estate,	\$1,229,875 00	
Resident bank stock,	57,015 00	
Total personal estate,		1,286,890 00
Total valuation,		\$14,890,765 00

APPROPRIATIONS.

State tax,	\$7,437 50
County tax,	13,388 55

Metropolitan sewer tax, .	\$ 9,727 23
City tax,	206,635 82

Overlay, including Met.	
Park tax, estimated,	11,463 29
	\$248,652 39

Rate of tax per \$1000.00, \$16.20.

Assessed on resident real and personal estate,	\$181,790 97
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Assessed on non resident real and personal estate,	59,439 42
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Assessed on 3,711 polls at \$2.00 each,	7,422 00
---	----------

	\$248,652 39

Number of residents assessed on property:

Individuals,	1,773
All others,	146

	1,919

Number of non residents assessed on property:

Individuals,	659
All others,	118

	777

Number of persons assessed for poll tax only,	2,804
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Number of horses assessed,	607
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Number of cows assessed,	186
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Number of swine assessed,	200
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VALUE OF PROPERTY EXEMPTED FROM TAXATION.

Houses of religious worship,	\$286,600 00
Literary institutions,	36,000 00
Charitable institutions,	11,025 00
	\$333,625 00

Respectfully submitted,
 FRANK R. UPHAM,
 WILLIAM MORSS,
 WALTER C. STEVENS,
 Board of Assessors.

ANNUAL REPORT OF THE
 TRUSTEES OF THE MELROSE PUBLIC LIBRARY
 FOR THE YEAR 1901.

To the Mayor and Board of Aldermen:

The Trustees of the Melrose Public Library respectfully present their thirty-first annual report, with reports from the Librarian and the Treasurer, believing the facts and figures contained in the first of these will justify the expenditure reported and our request for a continuance of your generous support.

In accordance with the purpose expressed by us in our application for an increased allowance one year ago, the library has been open every afternoon, except on Sundays and holidays, from two o'clock until nine. This extension of time met with immediate appreciation on the part of the public and, in our opinion, gives all the accommodation now desired.

Terms of sale recently adopted by publishing houses affect public libraries unfavorably, allowing them less discount than was formerly given. The purchasing power of our appropriation is thereby lessened, but we have tried in our selection of new books to furnish our citizens with the best works in various departments of literature and with accurate information concerning the world's progress. We do not enter into competition with private enterprises which agree to furnish all patrons copies of the latest popular novels, but as many copies of each of these books are placed in circulation as are to be found in the public libraries of cities larger than our own, and when returned to our shelves they are re-issued to the first applicant. Thus while we cannot prevent some disappointment we seek to avoid giving just cause for complaint.

An examination of our copies of works of the standard authors revealed some imperfect sets, and several volumes which having been in the library since the time of its formation were unattractive in form when compared with recent publications, and these have been replaced by complete new editions. Scott, Dickens, Irving and Victor Hugo are among the writers included. The Finding List, containing the names of these and of all books purchased prior to October, 1897, may be obtained from the Librarian without charge, and it is our wish that one may be placed in each family: Since the date mentioned, bulletins of additions to the library have been issued at regular intervals and have been widely distributed.

Service at the Melrose Highlands Branch has been continued, two exchanges of books being made each week, with a great increase of patronage.

For use in the Reading Room new volumes have been added to the reference library and copies of sixty-eight different magazines and papers are kept on file. The number of visitors to this department has been larger than in any previous year.

The interest of the public has been shown also by an increase in the circulation of books. The changes occurring

from year to year may be understood from the following figures:

During the year 1896 the circulation was, . . . 44,062

During 1897 (the library being closed two months
to prepare Finding List), . . . 38,674

During 1898 the circulation was,		55,935
" 1899 " " "		61,945
" 1900 " " "		60,001
" 1901 " " "		60,814

The decrease during 1900 was probably caused in part by the introduction of private circulating libraries. The reports of librarians throughout the state showed a similar condition. Some indeed report a continued decrease for the past year, but we appear to be recovering from the loss.

Such changes of percentage of the different classes of literature called for as may be noted, show an increasing demand for books of an instructive character. Fiction is nearly one per cent. lower although it includes several books the reading of which is a part of the home-work required of pupils in our public schools. Young people form a large class of our patrons and, we believe, find in the library an agreeable and helpful supplement to their schoolwork.

We desire to thank all friends who have made donations to the library.

In reporting so favorably upon the condition of the library our satisfaction was lessened by our conviction that we had reached the limit of growth and development possible in our present quarters. It is therefore with special gratification we learn that our hope for a new building may soon be realized, owing to the generous gift of twenty-five thousand dollars from Mr. Carnegie, to be used for this purpose.

We trust that with the aid thus received our city may erect a building which in appearance and in the accommodation provided for the library may be a source of pride and of satisfaction to our people in the coming years.

To any committee which may be appointed to accomplish this work the Trustees of your library will gladly give any assistance which a familiarity with its needs may render serviceable.

For the work of the library the coming year we ask an appropriation of three thousand dollars and the dog tax, to be applied in the manner reported by the Treasurer.

Respectfully submitted,

MARIA L. CHAPIN, Secretary.

CHARLES C. BARRY,

EDWARD M. MUNYAN,

CHARLES A. PATCH,

MARY L. CHARLES,

NEIL A. DIVVER,

MARIA L. CHAPIN,

Trustees.

MELROSE, January 24, 1902.

STATISTICS FOR 1901.

Number of volumes in the library Jan. 1, 1901,	13,350
“ “ purchased in 1901, . . . 644	
“ “ donated in 1901, . . . 18	
	662
Number of volumes in the library Jan. 1, 1902, . .	14,012
Number of persons using the library Jan. 1, 1901,	5,821
“ “ cards issued in 1901, . . . 1495	
“ “ “ relinquished in 1901, . . . 59	
	1,436
Number of persons using the library Jan. 1, 1902,	7,257
“ “ students' cards issued in 1901, . . .	370
“ “ teachers' “ “ “ “ . . .	32
“ “ volumes replaced in 1901, . . .	364
“ “ “ rebound in 1901, . . .	1,140
“ “ magazines bound in 1901, . . .	48

Circulation.

Largest number of books issued in one day,	603
Smallest " " " " " " " " (stormy)	57
Largest " " " " " " " month,	6,618
Smallest " " " " " " " "	3,907
Number of volumes sent to the Highlands,	3,894
Total number of books issued in 1901,	60,814
Number of days the library was open,	304

		Per cent
Fiction and Juvenile,	47,800	78.60
History and Travels,	3,284	5.40
Biography,	1,620	2.66
Literature and Essays,	1,041	1.71
Science and Arts,	1,971	3.24
Poetry and Drama,	591	.97
Religion,	1,305	2.15
Magazines,	3,202	5.27
	60,814	100.00

Reading Room.

Number of persons using reading room Jan. 1, 1901,	28,255
" " " " " " " " 1, 1902,	29,038
Books brought from library for use in reading room,	1,042
" taken on teachers' card for school use,	357

PERIODICALS IN READING ROOM.

American Agriculturist.
 American Kitchen Magazine.
 Arena.
 Art Amateur.
 Art Interchange.
 Atlantic Monthly Magazine.
 Birds and Nature.
 Book Buyer.
 Bookman.
 Century Magazine.

Chautauquan Magazine.
Cosmopolitan Magazine.
Christian Science Journal, . . . H. C. Lawrence.
Electrical Review.
Engineering, . . . W. H. Wiley.
Forest and Stream.
Forum.
Gartenlaube.
Great Round World.
Harper's Monthly Magazine.
Harper's Bazar.
Harper's Weekly.
Heating and Ventilation.
International Monthly.
Journal of the Western Society of Engineers.
Kindergarten Review.
Ladies' Home Journal.
Land of Sunshine, . . . F. A. Patten & Co.
L. A. W. Magazine.
Library Journal.
Life.
Lippincott Magazine.
Literary Digest.
Literary News.
Littell's Living Age.
London Illustrated News.
McClure's Magazine.
Munsey's Magazine.
National Magazine.
Nation.
New England Magazine.
North American Review.
Outing Magazine.
Outlook Magazine.
Overland Magazine.
Popular Science Monthly.
Popular Science News.
Protectionist.
Review of Reviews.
Scientific American.

Scientific American Architect and Builder.
 Scientific American Supplement.
 Scribner's Magazine.
 St. Nicholas.
 Strand Magazine.
 Studio.

PAPERS IN READING ROOM.

Chicago Inter-Ocean.
 Cincinnati Gazette.
 Melrose Journal, Mr. Charles H. Adams.
 Melrose Reporter, Mr. A. W. Dunton.
 National Tribune, G. A. R.
 New York Tribune.
 Pilot.
 Saturday Evening Post.
 Springfield Republican.
 Success.
 Tufts Weekly.
 Youth's Companion.

DONATIONS.

Books.

	Vols.
Acts and Resolves of Mass., C. H. Adams,	1
Alabama Arbitration, Thomas W. Balch,	1
Annual Report of the Metropolitan Water Board, . . .	1
" " " " Commissioners of Education, . . .	1
" " " " Smithsonian Institute,	1
" " " " Young Men's Christian Union,	
Boston,	1
Ceremonies Attending the Unveiling of Statute of	
Benjamin Franklin,	1
Dedicatory Exercises at the New Registry of Deeds	
Building, Cambridge,	1
Field Genealogy, Marshall Field,	2
History of the Y. M. C. A., Boston, Mr. F. P. Shumway,	1
History of the Ancient and Honorable Artillery Co. of	
Mass., Vol. 4.	1

In Memoriam William Henry Haile, Mrs. W. H. Haile,	1
Mass. Soldiers and Sailors of Revolutionary War, Vol. 8,	1
Menticulture, Miss S. A. Chever,	1
Proportional Representation, The Gove System, . . .	1
Soldiers and Sailors of Rev. War whose Graves are Designated by Markers,	1
250th Anniversary of Reading, North Reading and Wakefield, Mrs. C. L. Lothrop,	1

—
18*Pamphlets.*

Number of pamphlets in library, Jan. 1, 1901, . . .	2,020
Annual Report of the Indian Rights Association, . .	1
“ “ “ “ Mass. Total Abstinence Society, . .	1
“ “ “ “ Soldiers' Home at Chelsea, Mass. . .	1
Abbot Public Library, Marblehead,	1
Adams Nervine Asylum,	1
Brookline Public Library,	1
Concord Free Public Library,	1
Erie Public Library, Erie, Pa.,	1
Fitz Public Library, Chelsea,	1
Forbes Library, Northampton,	1
Hartford Public Library, Hartford, Conn.	1
Malden Public Library,	1
Manchester (N. H.), City Library,	1
Newark (N. J.), Free Public Library,	1
Newton Free Library,	1
Parlin Memorial Library, Everett,	1
Peabody Institute, Danvers,	1
Peabody Institute, Peabody,	1
Philadelphia Free Library,	1
Salem Public Library,	1
Shute Memorial Library,	1
Tufts Library, Weymouth,	1
Winthrop Public Library,	1
Worcester Free Public Library,	1
Address of the 100th, Anniversary of Town of Dana, R. H. Dana,	1

Afrikander Bond and other causes of war,	T. L. Schreiner,	1
Black Man and the Franchise,	T. L. Schreiner,	1
Condition of Mission Indians in Southern Cal.,	C. G. DuBois,	1
Craigie House, Cambridge,	Samuel S. Green,	1
Free Public Library Commission of Mass.,		1
Officers of Volunteers in service of U. S.,		1
Our Nation's Peril,	Lewis G. Janes,	1
History of Pocumtuck Valley Memorial Association,		
Deerfield, Mass.,		1
Progress of Forest Management in the Adirondacks,		1
Seventh Annual Meeting of Lake Mohonk Conference,		1
Some Aspects of the Native Question in South		
Africa,	T. L. Schreiner,	1
		2,056

Report of the Inspector of Buildings.

To Honorable Mayor Larrabee and the Honorable Board of Aldermen:

GENTLEMEN:—This, the second annual report of this department, shows an increase of buildings. There has been a more costly class of buildings, erected than formerly.

Among them are the apartment blocks of the Sircom Brothers, which are a credit to our city.

Much credit is due the Sircom Brothers for the tasty and substantial manner in which they have erected these buildings.

Most of the dwellings which have been erected are for permanent residence. These buildings have also been erected in a more tasty manner than formerly.

It is of interest to note that the estimated cost of new buildings for the year 1900 was \$74,970.00, while the estimated cost of new buildings for the year 1901, is nearly double, or \$168,975.00.

It is worthy of note that for the past two years there has not been a fire in a new building caused from a defective flue, imperfect fire-place, or heating pipe, showing that our Building Laws are not detrimental to the welfare of our city, its citizens, or the increase of building.

I respectfully recommend some action in regard to the Amendments to the Building Ordinance, which were placed before the Honorable Board by this department. This is a matter of much importance, and one that if not attended to may lead to serious trouble in the future.

I also respectfully recommend a fund of \$150.00 (additional to balance shown) be placed to the credit of this department, for contingent expenses.

The following table shows the number of inspections made by this department and the character of alterations ordered.

Inspection of chimneys,	34
Dangerous chimneys,	34
Faulty fire-place construction,	1
Changes ordered in furnace pipes,	14
Changes ordered in plans submitted,	4
Buildings in dangerous condition and ordered repaired,	1
Inspection of buildings in construction,	350
Inspection of foundations and cellar walls,	135
Inspection of boilers,	1
Inspection of fire escapes,	50

The following table shows the number of permits granted in each ward, and the use for which they were intended:

Buildings.	Wards.							Totals.
	1	2	3	4	5	6	7	
Additions	3	..	..	4	8	11	6	32
Alterations and Repairs.....	3	6	2	..	..	..	..	11
Carriages Houses.....	..	..	..	1	..	..	..	1
Chimneys	..	2	..	3	1	..	1	7
Dwellings	2	17	3	2	4	1	13	42
Factories	..	..	..	2	..	..	..	2
Foundations	2	2	2	3	2	3	2	16
Heating Apparatus	..	..	..	..	..	..	..	..
Stables	..	2	..	..	1	1	1	5
Store Houses.....	..	..	..	..	3	..	..	3
Stores and Offices	..	..	..	..	..	..	..	..
Miscellaneous	2	3	..	2	..	2	4	13
Totals	12	32	7	17	19	18	27	132

COST OF BUILDINGS FOR THE YEAR 1901.

	Ward 1.		Ward 2.		Ward 3.		Ward 4.		Ward 5.		Ward 6.		Ward 7.		Totals.	
	New.	Repairs.	New.	Repairs.	New.	Repairs.	New.	Repairs.	New.	Repairs.	New.	Repairs.	New.	Repairs.	New.	Repairs.
January	.....	\$150	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$4,800	.....	\$4,800	\$150
February	.....	600	.....	\$300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,449
March	.....	100	\$3,075	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,270
April	\$3,500	100	6,100	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,100
May	.....	75	3,800	300	\$9,500	5,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,400
June	.....	.....	4,000	75	.....	.....	\$3,400	.....	.....	.....	.....	.....	.....	.....	.....	1,610
July	.....	.....	1,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	760
August	.....	.....	3,000	88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,233
September	.....	.....	4,000	2,390	3,000	.....	.....	.....	20,000	300	\$1,000	170	4,000	500	.....	3,030
October	.....	.....	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,015
November	3,300	.....	7,500	20	.....	.....	4,500	.....	.....	1,300	.....	400	8,000	200	.....	2,740
December	.....	.....	16,000	.....	.....	.....	.....	.....	3,650	2,075	.....	15	1,200	600	.....	325
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,200	.....	2,000	.....	.....	.....
Totals	\$6,800	\$1,025	\$48,975	\$3,373	\$12,500	\$5,425	\$7,900	\$1,202	\$48,650	\$5,652	\$3,200	\$4,890	\$40,900	\$4,515	\$168,925	\$26,082

The following table shows the number of permits granted for each month of the year 1901.

January,	.	.	.	.	.	.	.	.	.	.	4
February,	.	.	.	.	.	.	.	.	.	.	10
March,	.	.	.	.	.	.	.	.	.	.	14
April,	.	.	.	.	.	.	.	.	.	.	14
May,	.	.	.	.	.	.	.	.	.	.	13
June,	.	.	.	.	.	.	.	.	.	.	8
July,	.	.	.	.	.	.	.	.	.	.	8
August,	.	.	.	.	.	.	.	.	.	.	13
September,	.	.	.	.	.	.	.	.	.	.	12
October,	.	.	.	.	.	.	.	.	.	.	12
November,	.	.	.	.	.	.	.	.	.	.	12
December,	.	.	.	.	.	.	.	.	.	.	12
Total,	.	.	.	.	.	.	.	.	.	.	132
Balance cash on hand,	.	.	.	.	.	.	.	.	.	.	\$12 50

IN CONCLUSION.

For the co-operation of His Honor the Mayor, the different departments, and the mechanics in general, I express my thanks.

Respectfully submitted,

W. A. GOODNO,
Inspector of Buildings.

Report of the Chief of Police.

OFFICE CHIEF OF POLICE, MELROSE,

February 1st, 1902.

To the Honorable the Mayor of the City of Melrose:

In accordance with the requirements of the ordinances, I have the honor to present for your consideration my second annual report of the doings of the Police Department for the year ending January 31, 1902.

FINANCIAL STANDING.

Appropriation for the year 1901.

Salaries, chief and regular officers,	\$10,150 00
“ For regular officer from May 20, 1901,	500 00
For special officers and vacations,	700 00
“ Contingent expenses and care of team,	550 00

	11,900 00
Expended, salaries and contingent expenses,	11,898 64

Balance,	\$1 36
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Deficit, unpaid bills to Feb. 1st, 1902,	\$95 95
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There has been received from court fees, and turned over to the City Treasurer the sum of \$206.70.

Offences for which arrests have been made are as follows:

Assault,	9
Bigamy,	1
Bastardy,	2
Bribery,	1
Being present where gaming implements were found,	4
Breaking and entering,	6
Concealing leased property,	1
City ordinances,	6
Drunkenness,	77
Demented,	1

Disturbing the peace,	4
Destroying property,	7
Disorderly conduct,	2
Default warrants,	2
Disobedient child,	1
Fraud,	1
Keeping and exposing,	1
Larceny,	8
Non support,	4
Search warrants,	6
Stealing,	1
Trespass,	1
Threats,	1
Vagrancy,	2

MISCELLANEOUS BUSINESS.

Alarms of fire given,	12
Accidents on street attended to,	7
Accidents on R. R. " "	1
Arrested for out of town officers,	3
Arc lights reported out,	110
Small lights reported out,	237
Whole circuits out,	5
Bicycles found and returned to owners,	5
Board of Health notices delivered,	360
City notices delivered, to Aldermen, etc.,	1,781
Cases investigated,	63
Dead animals reported,	4
Dogs killed,	12
Defects in streets reported,	60
Defects in sidewalks reported,	19
Doors found unlocked and secured,	88
Disturbances suppressed,	20
Fires attended,	44
Officers attending fires,	167
Fires extinguished,	5
Gas leaks reported,	20
Horses found cast at night,	3

Horses found on street and returned to owners,	2
Lost children cared for,	9
Lanterns hung in dangerous places,	5
Obstructions removed from street,	1
Persons assisted home,	14
Runaway teams stopped,	4
Summons served,	27
Stray teams put up at stable,	8
Vicious dogs reported,	3
Windows found open and secured,	34
Wires burning trees and reported,	4
Wires reported down,	20
Wagon calls answered,	42
Wagon calls in hospital cases,	22
Water breaks reported,	61
Value of property reported lost,	\$1,200 00
Value of property found and receipts taken,	\$975 15
Number of lodgers, year ending Jan. 31, 1902,	1,491

RECOMMENDATION.

As I recommended in my report of 1900 with reference to the tramp quarters, I would again call the attention of the authorities to the removal of the same to some building outside the City Hall, on account of the danger that those having business in the City Hall are exposed to.

POLICE FORCE.

On May 20, 1901, His Honor the Mayor appointed Frank N. Pierce to the regular force.

During the year there have been but few crimes of a serious nature, and each of these the guilty parties have been brought before the court to answer to the charges preferred. A great deal of attention has been given to the illegal sale of liquor, and every place that has been suspected has been closely watched.

The discipline of the department has been good and it has been the aim of each and every officer to so conduct himself as to be a credit to himself and the department.

CONCLUSION.

In submitting my report I wish to extend to His Honor the Mayor my sincere thanks for advice and cordial support given in the discharge of the duties of my office. Also to each member of the Police and License Committee, and all others that have in any way aided the department in the discharge of their duties.

Respectfully submitted,

FRANK M. McLAUGHLIN,

Chief of Police.

Second Annual Report

OF THE

Engineer and Superintendent

OF THE

PUBLIC WORKS DEPARTMENT,

CITY OF MELROSE, MASS.,

FROM FEBRUARY 1, 1901 TO JANUARY 31, 1902.

W. DABNEY HUNTER,
Engineer and Superintendent of Public Works.

MELROSE:
A. W. DUNTON & CO., PRINTERS, REPORTER OFFICE.
1902.

ORGANIZATION.

1901.

HON. JOHN LARRABEE,
Mayor.

W. DABNEY HUNTER,
Engineer and Superintendent.

EMMA L. LEIGHTON,
Stenographer.

WILLIAM H. MARTIN,
Book-keeper.

WILLIAM F. HUNT,
Assistant in charge of Engineering Division.

JAMES MARSHALL,
Assistant in charge of Highway Division.

*JAMES W. RILEY AND JAMES MCTIERNAN,
Assistants in charge of Water Division.

JAMES MCTIERNAN,
Assistant Clerk and Inspector in Water Division.

BARTLEY MALONEY,
Assistant in charge of Sewer Division.

*Died December 14, 1901.

To His Honor the Mayor, John Larrabee:

DEAR SIR:—I have the honor to submit to you the Second Annual Report of the Public Works Department of the City of Melrose, for the fiscal year ending January 31, 1902.

In writing this report I shall follow the same general order that I did in my First Annual Report, so that comparisons can be readily made.

PUBLIC WORKS OFFICE.

The work of this office has been much the same as that of last year, viz:—answering all correspondence, collecting all sundry charges in the water, sewer, and other divisions of the Public Works Department, writing contracts, proposals and agreements, reporting on orders and petitions to the Board of Aldermen and the various committees of the Board, and granting permits for sundry purposes.

A synopsis of this work is as follows:

Permits to occupy and open public streets,	124
“ “ move buildings through public streets,	8
Orders of the Board of Aldermen attended to or reported on,	64
Contracts written and made:—sewer pipe and specials, cement, brick, castings, water pipe and specials, granite catch-basin covers, concrete, street watering, brick work, delivery water pipe, sewer construction, telephone, and City Hall repairs, wiring and fixtures,	16
Private sewer estimates made,	68
Sidewalk “ “	37
Water estimates made, laying, cleaning, and repairing,	49
Street watering accounts assessed and certified to the Board of Assessors,	1,368
Sidewalk accounts assessed and certified to the Board of Assessors,	37
Water bills made out,	3,800

STATEMENT OF APPROPRIATIONS AND EXPENDITURES.

Clerk and Stenographer:

Appropriation,	\$500 00
Expended;	
For stenographer, 12 months, \$469 50	
For clerical assistance. 21 00	
	490 50

Balance in Treasury,	\$9 50
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Telephone Service:

Appropriation,	\$75 00
Expended:	
For New England Tel. & Tel.	
Co. for rentals and tolls,	66 67

Balance in Treasury,	\$8 33
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Contingent:

Appropriation	\$300 00
Expended:	
For printing, books and stationery,	\$142 28
For postage and rent Post Office boxes,	83 10
For repair typewriter and ribbons,	18 13
For repair buggy,	45 20
For expressage,	3 40
For Boston Directory,	5 00
For sundries, tickets and minor items,	14 37
*Deficiency,	11 48
	\$311 48 \$311 48

*Bill of A. Hocking for postage, . \$10 00
 Bill of S. G. Potter for stationery, . 1 90

In hands of City Auditor, unpaid,	\$11 90
Balance in Treasury,	42
	\$11 48

WATER DIVISION.

On December 14, 1901, James W. Riley passed away after a brief illness. He had been identified with the water department for fourteen years, serving as superintendent. For his faithful efforts and untiring energy the city is indebted. He was a faithful and conscientious public servant and his services will be missed.

The total collections for the year from all sources have been \$51,195.57, or \$4,979.09 more than last year, and is the largest ever reported, while the net cost of maintenance has been only \$6,606.33, or the smallest of any year since 1885.

STATEMENT OF EXPENDITURES.

Appropriation for Water Division:

Maintenance,	\$10,000 00	
Relaying,	15,000 00	
		\$25,000 00

Receipts to be credited to inside services and charges:

Cash paid treasurer,	\$1,723 99	
From other divisions of the Public Works Department,	606 77	
		\$2,330 76

EXPENDED.

For relaying pipes,	\$11,090 76	
For construction,	3,522 22	
For maintenance,	8,937 09	
Stock balance for 1901,	3,641 55	
Cash balance in treasury,	139 14	
		\$27,330 76

NOTE:—To obtain net cost of maintenance deduct receipts (\$2,330.76) from \$8,937.07, which gives \$6,606.33.

FINANCIAL STATEMENT.

(For the fiscal year ending January 31, 1902, not including the 1902 rates collected in January.)

To cash on hand Feb. 1, 1901,	.	.	.	\$53 94
“ sundry collections, summons 1900,	.	.	.	65 80
“ water rates, 1900,	.	.	.	932 01
“ “ “ 1901,	.	.	\$47,307 10	
“ summons, “	.	.	105 00	
				\$47,412 10

To sundry collections:

New services (38),	.	.	.	\$355 88
Renewing services (7),	.	.	.	137 16
Cleaning “ (54),	.	.	.	138 83
Thawing “ (5),	.	.	.	16 32
Repairing “ (44),	.	.	.	171 15
Sealing faucets (11),	.	.	.	7 30
Changing services (4),	.	.	.	14 55
Putting in temporary services (7),	.	.	.	46 05
On and off water (65),	.	.	.	83 37
On and off for non-payment (19),	.	.	.	38 00
Sundry work (55),	.	.	.	175 61
Sale of stock and material,	.	.	.	539 77
				\$1,723 99

To collection by treasurer from other divisions,	\$606 77
“ amount due from Commonwealth of Mass.,	
for water sold, as provided by Section 3,	
Chapter 392 of the Acts of 1898,	400 96
	\$51,195 57

CR.

By cash paid treasurer (J. W. Murray) sundries,	
1900,	\$ 65 80
By cash paid treasurer (W. D. Hunter) sundries,	
1901,	1,723 99
By cash paid treasurer, water rates, 1900,	718 85
“ “ “ sundry persons, refunds, 1901,	307 16
Amount carried forward,	\$2,815 80

Amount brought forward,	\$2,815 80
By cash paid sundry persons refunds 1900,	267 10
“ “ “ treasurer, water rates 1901,	47,076 02
“ “ collected by treasurer from other divisions,	606 77
By cash paid treasurer by Commonwealth of Mass.,	400 96
By cash on hand (J. W. Murray),	*28 92
	\$51,195 57

*Of the \$28.92, cash on hand, \$26.32 is for water rates and \$2.60 for summons.

STATEMENT FOR SINKING FUND.

DR.

To total collections for year ending	
Jan. 31, 1902,	\$51,195 57
Less refunds paid,	574 26
	\$50,621 31

CR.

By assessments paid Com. of Mass.:—	
Sinking Fund,	\$2,758 43
Interest on,	7,130 58
Cost of maintenance,	2,657 31
	\$12,546 32
By interest on bonds,	9,080 00
“ transfer to engineering,	1,000 00
“ cost of construction,	3,522 22
“ cost of relaying pipes,	11,090 76
“ cost of maintenance,	8,637 09
“ stock balance,	3,641 55
“ cash paid Edw. P. Comins,	70 00
	\$49,887 94
Surplus,	
	*\$733 37

*NOTE:—To check with Auditor's balance (\$7,173.31) subtract unexpended balance (\$139.14) and cash in hands of Collector (\$28.92) and add January collections of water rates for year 1902 (\$6,608.00).

COST OF CONSTRUCTION TO JAN. 31, 1902.

Cost as per report 1900,	\$422,373 29
Services 1901,	565 53
Extensions 1901,	2,956 69
Total,	\$425,895 51

SUMMARY OF FIXTURES AND SCHEDULE OF WATER SUPPLIED
February 1, 1902.

DESCRIPTION.	Charged.		Not Charged.	Totals.
	Rated.	Metered.	Public Buildings.	
Families.....	3322	76	.....	3398
Boarding Houses	2	3	.....	5
Stores and Shops	137	68	.....	205
Faucets	852 1	470	138	9132
Water Closets	309	219	138	3452
Bath Tubs.....	1997	69	3	2069
Full Houses	104	.....	.....	104
Use of Water Closet.....	92	.....	.....	92
Use of Bath Tubs.....	24	.....	.....	24
Urinals.....	3	13	23	39
Fountains	2	.....	7	9
Sill Cocks.....	846	18	14	878
Horses	323	203	8	534
Cows.....	40	2	2	44
Hose	1076	.....	14	1090
Boilers .....	.....	11	20	31
Motors .....	.....	4	.....	4

Number of water takers,	3,707
“ “ Vacancies,	407
“ “ Fire Hydrants,	266
“ “ Stand pipes (for street sprinkling),	25
“ “ “ “ (for cemetery),	12
“ “ Meters,	82
“ “ Gates on mains,	381

The purchase of stock was by bids, either advertised for or solicited. Lead lined pipe fittings were purchased of the Lead Lined Pipe Co.; lead pipe of the Chadwick-Boston Lead Co.; brass fittings of Scrannage Bros.; meters of the National Meter Co., and were in exchange for large meter sold them.

CANVAS OF BIDS FOR SUPPLYING 6 TONS OF SOFT PIG LEAD.

Opened May 10, 1901.

NAME AND ADDRESS.	Price per C. W. Ton.	Amount
Chadwick-Boston Lead Co., 180 Franklin St., Boston	\$4.56½	\$547.80
National Lead Co., 89 State St., Boston, Mass., . . .	4.58	549.60
Fitz, Dana & Co., 110 North St., Boston, Mass.,	4.75	570 00

Bid of Chadwick-Boston Lead Co. accepted.

CANVAS OF BIDS FOR SUPPLYING TEN 12 INCH THREE 10 INCH AND THREE 8 INCH BELL END WATER GATES.

Opened April 25, 1901.

NAME.	Address.	Amount.
Coffin Valve Co.,	Neponset, Mass.,	\$396.00
Rensselaer Valve Co., . . .	Troy, New York,	400.00
Chapman Valve Co., . . .	Indian Orchard, Mass.,	490.30
Ludlow Valve M'fg Co.,	150 High Street, Boston, Mass., . .	445.00

CANVAS OF BIDS FOR CAST IRON WATER PIPES AND SPECIALS.

Opened May 7, 1901.

DESCRIPTION.		Fred A. Houdlette, 139 Milk St., Boston, Mass.		Chas. Millar & Son Co., Utica, N. Y.		U. S. Cast Iron Pipe & Foundry Co., Philadelphia, Pa.		Camden Iron Works, Philadelphia, Pa.	
Tons.	Kind.	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
9.7821	4"	\$25.25	\$247.00	\$27.20	\$266.07	\$24.40	\$238.08	\$24.44	\$239.07
291.5033	6" to 16"	25.25	7,360.46	26.20	7,637.39	24.40	7,112.68	23.94	6,978.59
2.5	Tees, etc.,...	50.40	126.00	50.40	126.00	61.60	154.00	49.00	122.50
11.0	Special Castings }	50.40	554.40	50.40	554.40	61.60	677.60	55.00	605.00
Totals....			\$8,287.86		\$8,583.86		\$8,182.96		\$7,945.16

Metropolitan District.

Chapter 488 of the Acts of 1895, creating the Metropolitan Water Board and District, provided for the assessment upon the cities and towns of their proportional part of the cost, and also provided that only a certain amount (\$300,000) should be assessed the first year (1898,) which amount should be annually increased \$200,000.00 until such time as a sum sufficient to pay all the requirements of sinking-fund, interest and maintenance was raised.

Under the provisions of this act, Melrose was assessed in 1898, \$3,332.94; in 1899, \$4,921.63, and in 1900, \$6,740.49. The Metropolitan Board, seeing that under this arrangement a deficiency occurred each year, to provide for which bonds had to be issued, and after conference with the cities and towns within the district, applied to the Legislature for an amendment of Section 19 of said chapter, so that all the expense of interest, sinking-fund requirements, expense of maintenance and operation could be assessed at the present time. In 1901 the Legislature passed an act, Chapter 489, which gave to the Metropolitan Board the authority asked for. This increased the amount of the assessment of Melrose from \$6,740.49 to \$12,546.32, which amount will probably continue to increase slightly each year.

The present method of assessment is based on valuation and population (one third on valuation and two thirds on population) and there is no direct incentive for either the officials of the cities and towns in the districts, or the individual consumers, to economize. As a result of this condition, the consumption of water has rapidly increased, as will be seen from the following table prepared by the Metropolitan Board.

CONSUMPTION OF WATER IN THE METROPOLITAN WATER
DISTRICT AND SWAMPSCOTT, 1890-1901.

YEAR.	Water Consumption. Gallons per day.	Population.	Consumption per inhabitant. (Gallons per day.)
1890	47,824,000	654,957	73.0
1891	52,947,000	674,957	78.5
1892	57,987,000	694,735	83.5
1893	65,867,000	714,623	92.2
1894	65,070,000	734,512	88.6
1895	69,188,000	754,401	91.7
1896	78,032,000	776,947	100.4
1897	80,474,000	799,493	100.7
1898	83,303,000	822,039	101.3
1899	91,773,000	844,585	108.7
1900	97,650,000	867,131	112.6
1901	104,185,000	890,705	117.0

Increase in decade from 1891 to 1901 :

In population,.....32 per cent.

In consumption per inhabitant,.....49 per cent.

In total consumption,.....97 per cent.

That part of the assessment levied on population should be levied on relative consumption. There is now before the Legislature a bill to this effect, which, if passed, will be a direct incentive for the officers of each municipality to prevent, as far as possible, the excessive use or waste of water, and would no doubt lead to the adoption of meters.

Meters.

Persons paying a large water tax very generally request meters. The belief prevails that the mere adoption of meters would reduce the rates; if it did, it would also reduce the revenue which is not desirable at present, as many of the old cement pipes have got to be taken out, the cost of which should be paid from the receipts.

There are, as will be seen from the table published elsewhere, about 23 miles of cast iron mains and 24 miles of cement pipes. A great many of these cement pipes are old and worn out, are not strong enough to stand the increased



PLATE I. Showing Nash Meter No. 156845 nearly filled with rust and deposit. Taken from Hotel Bigelow, Cor. Main and Franklin Sts.

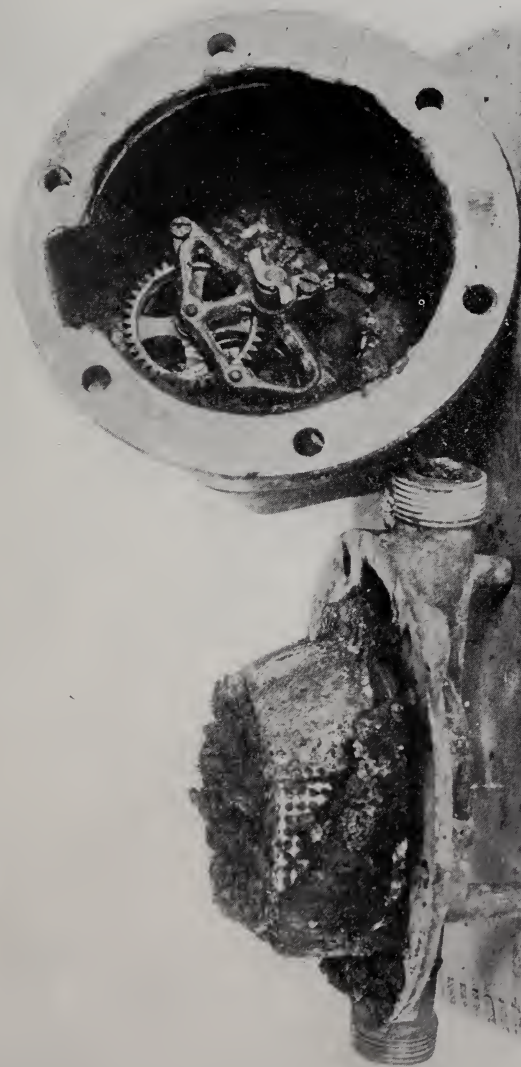


PLATE II. Showing Nash Meter No. 148746 nearly filled with rust and deposit. Taken from Geo. F. Boardman Block, Franklin St.

pressure, and further than this, are too small to supply the territory to which they lead and therefore should be taken out and replaced with cast iron pipes of a larger size. This can all be done within a few years from the receipts, provided the additional cost for increasing their size is charged to construction and paid for by issuing bonds.

The adoption of meters would also increase the expense of maintenance, as a repair shop would have to be installed and a force of mechanics and inspectors kept continually at work. Meters are very apt to get out of order and unless frequently inspected and cleaned, do not register all the water passing through them. The accompanying cuts show the condition of two meters taken out the past season, They were entirely filled with rust and deposit and, although they still continued to register, did not register all the water passing through them.

Relaying Pipes.

In connection with this work it is desirable to revise and improve the distribution, which briefly described is to encircle the center of the city, which is situated in a valley with a main pipe from which a more direct feed can be supplied to all the pipes running to the hills, thereby increasing the pressure in these localities.

The estimated cost of this loop line is:—

STREET.	LOCATION.		Linear Feet.	*Price per Foot.	Cost.	Ledge @ \$3.00 per Yard.	Total Cost.
Avon street	From	Green street	to Elm street	\$1.795	\$678.51	.....	\$678.51
Elm "	"	Avon "	" Linden "	"	743.13	.....	743.13
Linden "	"	Elm "	" Porter "	"	1,173.93	.....	1,173.93
Porter "	"	Linden "	" Fletcher "	"	303.35	.....	303.35
Fletcher "	"	Porter "	" Upham "	"	1,820.13	.....	1,820.13
Upham "	"	Fletcher "	" Sewall "	"	380.54	.....	380.54
Sewall "	"	Upham "	" First "	"	775.44	.....	775.44
First "	"	Sewall "	" Larrabee "	"	132.83	.....	132.83
Larrabee "	"	First "	" Grove "	"	1,662.17	.....	1,662.17
Grove "	"	Larrabee "	" Whitman avenue. .	"	21.54	.....	21.54
Whitman avenue. .	"	Grove "	" Rogers street.....	"	1,391.12	\$225.00	1,616.12
Rogers street.....	"	Whitman av.	" Meridian "	"	766.46	.....	766.46
Beech avenue.....	"	Meridian street	" Linwood avenue. .	"	2,803.79	135.00	2,938.79
Linwood avenue.....	"	Beech av. ex.	" Lynde street.	"	626.45	.....	626.45
Lynde street.....	"	Linwood av.	" Summer street . .	"	728.77	.....	728.77
Summer street.....	"	Lynde street	" Wyoming avenue. .	"	1,278.04	.....	1,278.04
Wyoming avenue....	"	Summer "	" Main street.....	"	1,069.82	.....	1,069.82
Cleveland street....	"	Wyoming av.	" Maple "	"	2,489.66	105.00	2,594.66
Maple "	"	Cleveland st.	" Vinton "	"	393.10	.....	393.10
Vinton "	"	Maple street	" Orris "	"	7,178.20	945.00	8,123.20
Orris "	"	Vinton "	" Warren "	"	1,342.66	.....	1,342.66
Warren "	"	Orris "	" Franklin "	"	1,098.54	.....	1,098.54
Totals			16,077	.....	\$28,558.18	.....	\$30,268.18

*Computed from actual cost of Franklin and Green streets pipe lines as laid in 1901, and includes "specials," services, gates, etc.

In addition to this high service loop line many other street mains through the central section of the city should be relaid, as the pipes are old and in a very poor condition. This is especially true, as indicated by the number of breaks, of the pipes in:

Wyoming avenue from	Cleveland street to	Main street.
Upham street	" Main	" " Fletcher "
Vine "	" Myrtle	" " Essex "
Foster "	" Main	" " Vinton "
Maple "	" Vinton	" " Poplar "
Lebanon "	" Upham	" " Beech avenue.
Cedar park	" Vinton	" " Emersonstreet.
Winthrop street	" Main	" " Myrtle "
Emerson "	" Main	" " Fletcher "
Porter "	" Main	" " " "
Elm "	" Linden	" " Howard "
Ashland "	" Melrose	" " Franklin "

STATEMENT OF RECEIPTS AND EXPENDITURES.

Appropriation,	\$15,000 00
Refund from maintenance account for stock trans- ferred,	3,488 24
Expended:	
Labor as per pay rolls, \$3,630 24	
" " " invoice, 88 42	
Stock " " " 10,662 90	
	\$14,381 56
Amounts transferred to construction, . . \$550 00	
Amounts transferred to maintenance, . . 3,556 68	
	\$4,106 68
	\$18,488 24 \$18,488 24

SUMMARY OF WORK DONE TOGETHER WITH ITS
COST BY STREETS.

LOCATION.	Pipe.		Gates.		Hydrants.	Cost.		Total Cost.
	Length. Feet.	Size. Inches.	No.	Size in.		Stock.	Labor.	
Ashland street....	20	8	...	...	...	...	...	...
“ “	7	4	...	...	...	\$29.88	\$10.70	\$40.58
Albion “	35	6	1	6	...	30.57	7.20	37.77
Avon street.....	36	12	1	12	...	83.10	12.50	95.60
Cliff “	3	6	...	...	...	.02	1.59	6.61
Eastman place....	311	6	2	6	1	267.21	81.44	348.65
E. Emerson street	8	6	...	...	...	16.02	6.13	22.15
Farwell avenue ...	4	6	...	...	...	4.90	2.56	7.46
Franklin street ...	1,825	12	3	12	2	2,294.49	837.09	3,131.58
Green street.....	1,043	12	1	6	...	...	...	...
“ “	1,595	6	1	12	...	2,067.41	1,007.32	3,074.73
Gooch “	29	6	...	...	...	28.70	12.19	40.89
Howie court.....	36	6	...	...	...	...	...	...
“ “	33	4	1	6	...	50.41	15.16	65.57
Howard street....	12	8	...	...	...	...	...	...
“ “	5	4	...	...	...	16.70	5.75	22.45
Holbrook court...	16	6	...	...	...	10.90	4.50	15.40
Linden place	285	6	1	6	1	108.76	67.52	176.28
Lebanon street ...	1,412	6	...	...	...	766.16	503.74	1,269.90
Laurel “	1,623	6	3	6	1	971.35	770.89	1,742.24
Larrabee “	53	6	...	...	...	65.54	20.09	85.63
Main street.....	12	10	...	...	...	...	...	...
“ “	4	4	...	...	...	26.57	9.60	36.17
Park “	134	6	...	...	...	115.04	65.18	180.22
Pratt “	19	6	...	...	...	12.75	4.50	17.25
Rowe “	2	6	...	...	...	.75	1.13	1.88
Sargent street....	20	6	...	...	...	11.58	5.06	16.64
Short “	2	4	...	...	...	2.54	2.00	4.54
Stevens place	360	6	...	...	...	180.90	97.60	278.50
Sixth street	37	6	...	...	...	28.03	13.56	41.59
W. Linden street..	5	6	...	...	...	4.22	5.09	9.31
Winthrop place...	18	4	...	...	...	6.79	3.94	10.73
Wyoming avenue ..	251	6	...	...	...	...	...	...
“ “	18	16	1	6	...	158.48	97.50	255.98
Prospect street ...	40	4	...	...	...	18.75	22.75	41.50
West Hill avenue ..	14.5	16	...	...	...	9.03	3.93	12.96
Totals.....	.....	.....	.....	.....	.....	\$7,392.55	\$3,698.21	\$11,090.76

NOTE.—The 12" pipe laid in Franklin and Green streets is a part of the high service loop referred to.

Construction.

To this account is charged the cost of all extensions, all new service pipes, hydrants, gates, etc., except where they

are put in to replace old ones. A summary of the work done, together with its cost, follows:

LOCATION.	Pipe.		Gates.			Cost.		Total Cost.
	Length. Feet.	Size, Inches.	No.	Size in.	Hydrants.	Stock.	Labor.	
Argyle street....	80	6	...	...	...	\$41.00	\$ 31.50	\$ 72.50
Boardman avenue..	166	6	...	...	...	72.84	60.55	133.99
Crescent avenue..	41	6	...	...	...	18.63	4.97	23.60
Fletcher street....	372	12	1	6	...	439.64	139.64	579.28
Franklin street....	.....	.....	.....	.....	1	.....	.....	.....
Hancock street...	450	6	...	...	1	259.82	155.46	415.28
Laurel street....	939	6	...	...	3	579.80	214.48	794.23
Mountain avenue..	264	6	...	...	...	155.30	301.01	456.31
Prospect street....	.....	.....	.....	.....	1	35.00	1.56	36.56
Richardson road..	281	6	1	6	...	148.19	117.87	266.06
Stevens place....	.....	.....	.....	.....	1	.....	.....	.....
Wyoming avenue..	96	6	...	...	...	57.70	34.37	92.07
Lebanon street...	.....	6	1	6	1	43.35	.....	43.35
Service pipes.....	46new	...	...	...	...	363.84	201.69	565.53
Blacksmithing, oil and sundries not included in above	.....	.....	.....	.....	.....	.....	.....	44.06
Totals.....	372' 12'' 2,317' 6''	3	...	8	...	\$2,215.11	\$1,263.05	\$3,522.22

NOTE.—The 12'' pipe in Fletcher street is a part of the high service loop referred to. The expense of setting the hydrants on Franklin street, \$30.02, and on Stevens place, \$64.92, was paid out of the appropriation for relaying pipes.

EXPENDITURES BY STREETS IN DETAIL.

Ashland Street.

Stock:—20 feet 8 inch cast iron pipe, 1 8 inch reducer, 7 feet 4 inch cast iron pipe, 1 4 inch bend, 1 8 inch sleeve, 2 6 inch reducers, 1 4 inch sleeve,	\$29 88	
Labor,	10 70	
		\$40 58

Albion Street.

Stock:—35 feet 6 inch cast iron pipe, 1 6 inch gate, 1 6 inch reducer, . . .	\$30 57	
Labor,	7 20	
		37 77

Avon Street.

Stock:—36 feet 12 inch cast iron pipe,		
1 12x6 inch reducer, 1 4 inch		
sleeve, 1 6x4 inch reducer, 1 12		
inch gate,	\$83 10	
Labor,	12 50	
		95 60

Cliff Street.

Stock:—3 feet 6 inch cast iron pipe,		
1 6 inch sleeve,	\$5 02	
Labor,	1 59	
		6 61

Eastman Place.

Stock:—345 feet 6 inch cast iron pipe,		
2 6x6 inch branches, 1 6 inch		
bend, 1 6 inch hydrant, 1 6 inch		
gate, 3 6 inch sleeves, 1 14x6 inch		
branch, 1 6 inch gate,	\$267 21	
Labor,	81 44	
		348 65

Farwell Avenue.

Stock:—4 feet 6 inch cast iron pipe,		
1 sleeve,	\$4 90	
Labor,	2 56	
		7 46

East Emerson Street.

Stock:—8 feet 6 inch cast iron pipe,		
1 6 inch reducer, 1 6 inch bend, .	\$16 02	
Labor,	6 13	
		22 15

Franklin Street.

Stock:—1744½ feet 12 inch cast iron		
pipe, 15 feet 6 inch cast iron pipe,		
13 12 inch branches, 3 12 inch		
gates, 3 sleeves, 1 plug, 2		
hydrants (new),	\$2,294 49	
Labor,	837 09	
		3,131 58

Green Street.

Stock:—990 feet 12 inch cast iron pipe, 7 12 inch branches, 2 12 inch bends, 2 12 inch sleeves, 1 12 inch gate, 1 6 inch gate, 1,586½ feet 6 inch cast iron pipe, 7 6 inch branches, 1 sleeve, 6 feet 2 inch pipe, 8 feet ¾ inch pipe, . . .			\$2,067 41	
Labor,			1,007 32	
				3,074 73

Gooch Street.

Stock:—29 feet 6 inch cast iron pipe, 2 6x4 inch reducers, .. .			\$28 70	
Labor,			12 19	
				40 89

Howie Court.

Stock:—36 feet 6 inch cast iron pipe, 1 sleeve, 33 feet 4 inch cast iron pipe, 1 reducer, 1 bend, 1 gate, .			\$50 41	
Labor,			15 16	65 57

Howard Street.

Stock:—12 feet 8 inch cast iron pipe, 1 8x6 inch branch, 5 feet 4 inch cast iron pipe, 1 6x4 inch branch, 1 4 inch sleeve,			\$16 70	
Labor,			5 75	
				22 45

Holbrook Court.

Stock:—16 feet 6 inch cast iron pipe,			\$10 90	
Labor,			4 50	
				15 40

Linden Place.

Stock:—285 feet 6 inch cast iron pipe, 1 6x4 inch branch, 1 6 inch gate,			\$108 76	
Labor,			67 52	
				176 28

Laurel Street.

Stock:—1,602½ feet 6 inch cast iron pipe, 4 6 inch branches, 3 6 inch gates, 1 6 inch hydrant, 1 reset, 1 6 inch reducer, 5 6 inch sleeves,	\$971 35	
Labor,	770 89	
		1,742 24

Larrabee Street.

Stock:—53 feet 6 inch cast iron pipe, 2 12x6 inch reducers, 1 12x6 inch branch, 2 6x4 inch reducers, .	\$65 54	
Labor,	20 09	
		85 63

Lebanon Street.

Stock:—1,382 feet 6 inch cast iron pipe, 6 6 inch branches, 1 6 inch reducer, 1 6 inch bend. . .	\$766 16	
Labor,	503 74	
		1,269 90

Main Street, Junction of Franklin and Green Streets.

Stock:—12 feet 10 inch cast iron pipe, 1 10x6 inch reducer, 4 feet 4 inch cast iron pipe, 1 6x4 inch reducer, 1 4 inch sleeve,	\$26 57	
Labor,	9 60	
		36 17

Park Street.

Stock:—134 feet 6 inch cast iron pipe, 2 6 inch sleeves,	\$65 18	
Drilling,	29 41	
Labor,	85 63	
		180 22

Pratt Street.

Stock:—19 feet 6 inch cast iron pipe, 1 6 inch reducer, 1 sleeve, . . .	\$12 75	
Labor,	4 50	
		\$17 25

Rowe Street.

Stock:—2 feet 6 inch cast iron pipe,	\$ 75	
Labor,	1 13	
		\$1 88

Sargent Street.

Stock:—20½ feet 6 inch cast iron		
pipe, 1 6 inch reducer,	\$11 58	
Labor,	5 06	
		\$16 64

Short Street.

Stock:—2 feet 4 inch cast iron pipe,		
1 sleeve and lead,	\$2 54	
Labor,	2 00	
		\$4 54

Stevens Place.

Stock:—349½ feet 6 inch cast iron		
pipe,	\$180 90	
Labor,	97 60	
		\$278 50

Sixth Street.

Stock:—37 feet 6 inch cast iron pipe,		
2 6x4 inch reducers,	\$28 03	
Labor,	13 56	
		\$41 59

West Linden Street.

Stock:—5 feet 6 inch cast iron pipe,		
1 6 inch sleeve,	\$4 22	
Labor,	5 09	
		\$9 31

Winthrop Place.

Stock:—18 feet 4 inch cast iron pipe,		
1 4 inch sleeve,	\$6 79	
Labor,	3 94	
		\$10 73

Prospect Street.

Stock:—40 feet 4 inch cast iron pipe,		
1 4 inch sleeve,	\$18 75	
Labor,	22 75	
		\$41 50

Wyoming Avenue, Ravine Road West.

Stock:—251 feet 6 inch cast iron pipe,		
1 6 inch sleeve, 1 6 inch gate, . .	\$158 48	
Labor,	97 50	
		\$255 98

Wyoming Avenue at Railroad.

Stock:—18 feet 16 inch cast iron pipe,		
1 16 inch sleeve,	\$44 45	
Labor,	13 59	
Paid out of maintenance,	\$58 04	

West Hill Avenue.

Stock:—14½ feet 6 inch cast iron		
pipe, 1 6 inch sleeve,	\$9 03	
Labor,	3 93	
		\$12 96

		\$11,090 76
Treasury Account,		\$18,488 24
Cash transferred to construction		
account,	\$550 00	
Cash transferred to maintenance		
account,	3,556 68	
Stock transferred to maintenance		
account,	3,488 24	
Expended on work as per report, .	11,090 76	
		\$18,685 68
Less stock used and accounted for		
in maintenance,	197 44	
		\$18,488 24

STATEMENT OF RECEIPTS AND EXPENDITURES.

Appropriation,	\$3,000 00	
Transferred from relays (Order 1424),	550 00	
Transferred by invoice to maintenance,	5 63	
Transferred by invoice to relay,	62 30	
		\$3,617 93
Expended:		
Labor as per pay rolls,	\$1,330 98	
Stock purchased,	2,259 17	
		\$3,590 15
Cash balance in treasury,		\$27 78

EXPENDITURES BY STREETS IN DETAIL.

Construction, Services, (outside.)		
Labor as per pay rolls,	\$201 69	
Stock used:—46 new services, 9 renewals, 1 extended, 1205 feet pipe and fittings,	\$363 84	
		\$565 53
Construction in main lines:		
<i>Argyle Street.</i>		
Stock:—80 feet 6 inch cast iron pipe, and fittings,	\$41 00	
Labor,	31 50	
		\$72 50
<i>Boardman Avenue.</i>		
Stock:—166 feet 6 inch cast iron pipe, 1 sleeve,	\$72 84	
Labor,	60 55	
		\$133 39
<i>Crescent Avenue.</i>		
Stock:—41 feet 6 inch cast iron pipe,	\$18 63	
Labor,	4 97	
		\$23 60

Fletcher Street.

Stock:—372 feet 12 inch cast iron pipe, 1 12 inch clamp, 3 feet 6 inch cast iron pipe, 1 6 inch gate, 1 12 inch branch 12x6 inch,	\$439 64	
Labor,	139 64	
		\$579 28

Franklin Street.

Stock:—1 6 inch hydrant, 7 feet 6 inch pipe and lead, paid out of relay,	\$30 02	
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Hancock Street.

Stock:—456 feet 6 inch cast iron pipe, 1 6 inch hydrant, 1 6 inch gate, 2 6 inch branches,	\$259 82	
Labor,	155 46	
		\$415 28

Laurel Street.

Stock:—939 feet 6 inch cast iron pipe, 3 6 inch gates, 2 6 inch hydrants, 2 6 inch branches,	\$579 80	
Labor,	214 43	
		\$794 23

Mountain Avenue.

Stock:—264 feet 6 inch cast iron pipe, 1 6 inch bend, 1 6 inch reducer,	\$126 37	
Powder,	28 93	
Labor,	301 01	
		\$456 31

Prospect Street.

Stock:—5 feet 4 inch cast iron pipe, 1 4 inch branch, 1 4 inch hydrant,	\$35 00	
Labor,	1 56	
		\$36 56

Richardson Road.

Stock:—281½ feet 6 inch cast iron pipe, 1 6 inch branch, 1 6 inch gate,	\$148 19	
Labor,	117 87	
		\$266 06

Stevens Place.

Stock:—36 feet 6 inch cast iron pipe,
 1 6 inch hydrant, 1 6x6 inch branch,
 1 6 inch gate, 2 sleeves. Paid
 out of relay, \$64 92

Wyoming Avenue.

Stock:—96 feet 6 inch pipe, cast iron,
 1 6 inch branch, \$57 70
 Hydrant changed, 34 37
 ————— \$92 07

Lebanon Street.

Stock:—1 new hydrant and gate-box,
 1 6x6 inch branch and gate-box, 43 35
 Blacksmithing, oil and sundries, not
 divided in above accounts, \$44 06
 Transferred to maintenance
 and relays for which cred-
 it is given relays, \$5 63
 62 30 67 93 111 99
 —————
 \$3,590 15
 Balance in treasury, 27 78
 —————
 Total, \$3,617 93

In addition to this, there should be charged to construc-
 tion and credited to relay or reconstruction, the difference
 in the cost of pipes of the size taken out and the actual cost
 of the size of the new pipes laid in their place, which is as
 follows:

Relaid 1901.

54 feet 4 inch pipe @ \$.25	\$ 14 00	
6233 feet 6 inch pipe @ .375	2,337 38	
32 " 8 " " " \$.58	18 56	
12 " 10 " " " .70	8 40	
2940 " 12 " " " 1.00	2,940 00	
18 " 16 " " " 1 50	24 00	
Amount carried forward,	—	\$5,342 34

Amount brought forward, . . . \$5,342 34

Abandoned 1901.

360 feet $\frac{3}{4}$ inch pipe @ \$.06 . . .	\$ 21 60
458 " 2 " " " .12 . . .	54 72
1388 " 4 " " " .25 . . .	397 00
7055 " 6 " " " .375 . . .	2,645 63
12 " 10 " " " .70 . . .	8 40
18 " 16 " " " 1.50 . . .	24 00
	\$3,151 35
Difference to be charged to construction,	\$2,190 99

Relaid 1900.

295 feet 4 inch pipe @ \$.25 . . .	\$ 73 75
4024 " 6 " " " .375 . . .	1,509 00
3844 " 8 " " " .58 . . .	2,229 52
	\$3,812 27

Abandoned 1900.

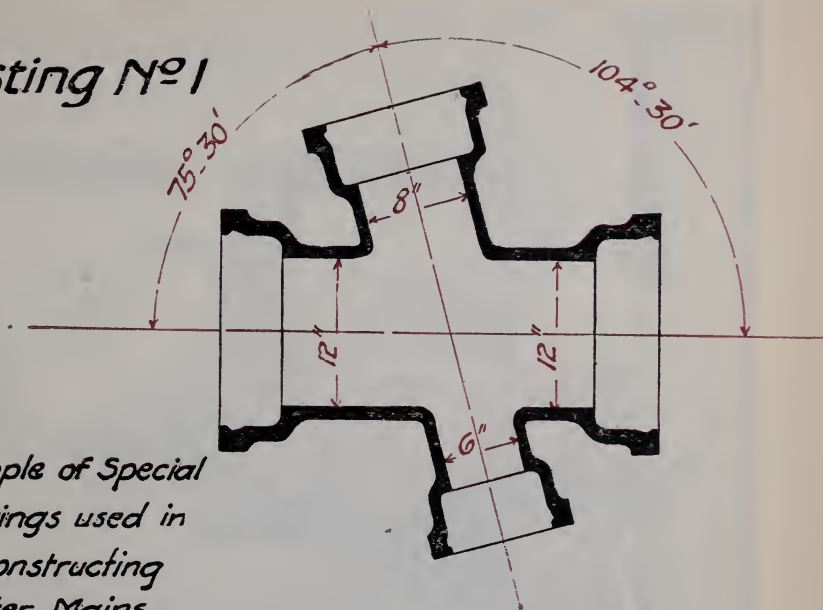
3 feet $\frac{3}{4}$ inch pipe @ \$.06 . . .	\$ 18
405 " 1 " " " .09 . . .	36 45
250 " 2 " " " .12 . . .	30 00
5061 " 4 " " " .25 . . .	1,265 25
2444 " 6 " " " .375 . . .	916 50
	\$2,248 38
Difference to be charged to construction,	\$1,563 89

Maintenance.

All work and expense not directly chargeable to construction or to relaying pipes is charged to maintenance, a large portion of which, such as superintendence, rent of yard and stable expense, might justly be charged to relaying pipe and construction.

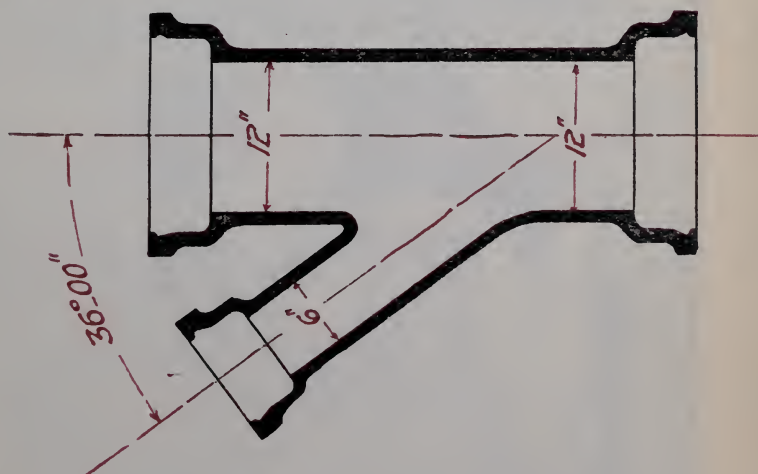
46.55 miles of main pipes and 3,177 service pipes have been cared for and kept in repair, 267 fire hydrants have been

Casting N^o1



Sample of Special
Castings used in
Reconstructing
Water Mains ~

Casting N^o2



Coasting No. 1



Coasting No. 1
is a coupling
between
two shafts

Coasting No. 2





PLATE IV. Showing cement lined pipe effaced by rust and cast iron branches broken by electricity,

oiled, cleaned and painted, and kept free from snow and ice. The work classified is:

- 121 breaks in street mains.
- 142 breaks in outside service pipes.
- 25 breaks in inside service pipes.
- 90 service pipes cleaned outside.
- 61 service pipes cleaned inside.
- 38 service pipes extended inside.
- 5 meters set.
- 7 gates reset.
- 2 stand pipes reset.

Leaks and breaks are due in most part to defects in the pipes. In cast iron pipes it is invariably at a joint where a change in the line has been made without the proper castings; to prevent this in the new lines laid there is placed at all junctions and angles a special casting made from drawings like Plate III.

34 of these castings were placed in the lines laid last year; the expense is only \$6.00 more per ton than stock castings.

Still other breaks are caused by lightning, which will sometimes split a pipe the entire length of a street. Plate IV shows two "tees" taken out at junctions of Grove and Sixth streets and Grove street and Swain's Pond avenue, which were broken from this cause. This cut also shows the condition of the cement pipe in some of the streets.

RECEIPTS AND EXPENDITURES.

Appropriation,		\$7,000 00
Amount transferred from relay account,		3,556 68
Cash receipts paid to treasurer,	\$1,723 99	
" " from " water construction for stock,	2,230 24	
Cash receipts from water relay,	1,310 54	
" " " street sprinkling,	136 23	
" " " surface drainage,	438 10	
Amounts carried forward,	\$5,839 10	\$10,556 68

Amounts brought forward,	\$5,839 10	\$10,556 68
Cash receipts from sewer construction,	1 35	
" " " " maintenance,	19 69	
" " " " private,	66	
" " " " C. B. and drains,	3 28	
Cash receipts from highway maintenance,	7 46	
		\$5,871 54
		\$16,428 22

Expended:

Labor as per pay roll,	\$5,276 83	
Stock and sundries as per invoices approved,	11,040 03	
		\$16,316 86
Balance in treasury,		\$111 36

EXPENDITURES IN DETAIL.

Services.

Stock used,	\$270 25	
Labor as per pay rolls,	1,042 36	
No. service leaks repaired, 141,		
" " cleaned, 90.		
		\$1,312 61

Main Line Pipe and Hydrants.

Stock used,	\$498 97	
Labor as per pay rolls,	730 32	
No. leaks repaired, 121.		
		\$1,229 29

Inside Services and Charges.

Stock,	\$1,597 52	
Labor as per pay rolls,	472 43	
No. stand pipe leaks repaired,	25.	
No. services cleaned or repaired, 61.		
		2,069 95
Amount carried forward,		\$4,611 85

Amount brought forward, . . . \$4,611 85

General Maintenance.

Labor on pay rolls, J. W. Riley,	
(10 months salary), . . .	\$1,000 00
Labor on pay rolls, J. McTiernan, . .	782 50
" " " " W. H. Martin, . .	457 91
" " " " Inspection, on	
and off water, sealing faucets and	
sill cocks and minor repairs not	
directly chargeable to other ac-	
counts,	438 74
Total,	<u>\$2,679 15</u>

STOCK AND INVOICES.

J. W. Riley, 1 mo. salary by	
invoice,	\$100 00
One half the rent Tremont	
street yard,	175 00
Rent Sanford street shop, . .	150 00
Board 2 horses and team	
hire,	458 25
Blacksmithing and repair-	
ing tools,	160 10
Painting and repairing carts, .	106 19
Repairing harness,	22 45
Coal for shop use,	15 75
Carpenter work, W. A.	
Goodno,	38 00
Water damage, break on	
Main St., (W. Newhall), . .	28 33
Concrete repairs, C. L.	
Hoffman,	71
Making negatives, G. T.	
Barker,	1 50
Telephone service, N. E. T.	
& T. Co.,	44 95

Amts. carried forward, \$1,301 23 \$2,679 15 \$4,611 85

Amts. brought forward	\$1,301 23	\$2,679 15	\$4,611 85
Freight and expressage,	14 30		
Advertising and notices,	68 30		
Postage,	20 00		
Books, printing and station- ery, A. W. Dunton & Co.	\$53 50		
Books, printing and station- ery, S. G. Potter,	41 30		
Books, printing and station- ery, Melrose Journal,	30 00		
Books, printing and station ery, Edw. Hammond,	6 50		
Books, printing and station- ery, Wadsworth, How- land & Co.,	60		
Books, printing and station- ery, J. E. Ricker,	60		
Books, printing and station- ery, G. F. King Co.,	12 00		
Repair to meters,	33 80		
Tools and sundries, H. J. Perry,	25 60		
Sundries, F. E. Coyle,	1 79		
" Brock Bros.,	05		
" Scrannage Bros.,	1 30		
" Perrin, Seamans & Co.,	3 80		
Sundries, Smith Bros.,	6 60		
" Larrabee & Stearns,	1 35		
" Frost & Hawes,	4 22		
Oil, Lucey Bros.,	19 25		
		\$1,646 09	
			\$4,325 24

Stock.

Amount paid for C. I. pipe and fit- ting,	\$9,126 55
Amount paid for freight on stock,	1,056 86

Amounts carried forward,	\$10,183 41	\$8,937 09
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Amounts brought forward,	\$10,183 41	\$8,937 09
Amount paid for lead pipe and lead,	1,383 19	
" " " castings,	114 08	
" " " lead lined pipe and fittings,	261 03	
Amount paid for brass fittings and stops,	503 07	
Amount paid for W. I. pipe and fittings,	210 23	
Amount paid for gates and valves,	630 97	
" " " gate boxes,	114 62	
" " " teaming stock,	212 60	
" " " cement,	20 58	
" " " wood and coke,	57 70	
" " " tapping machines and valves,	669 75	
Amount paid for meters,	240 75	
" " " tools, oil and jute,	259 68	
" " " lumber,	55 15	
" " " horses,	425 00	
	<u>\$15,341 81</u>	
Amount paid labor on stock, per pay roll,	297 75	
	<u>\$15,639 56</u>	

CR.

By stock used on construction services,	\$363 84	
By stock used on construction main lines,	1,895 33	
By stock used on relay services,	7,174 66	
By stock used on relay services,	197 44	
By stock used on maintenance services,	270 25	
	<u>\$9,901 52</u>	
Amts. carried forward,	\$9,901 52	\$15,639 56
		<u>\$8,937 09</u>

Amts. brought forward,	\$9,901 52	\$15,639 56	\$8,937 09
By stock used on maintenance inside and charges,	1,597 52		
By stock used on maintenance main line,	498 97		
	<u> </u>	\$11,998 01	
Stock balance, 1901,			\$3,641 55
Stock transferred,			3,540 78
Stock used in relay, not included in that account,			<u>197 44</u>
Total,			\$16,316 86
Cash balance in treasury,			<u>111 36</u>
			\$16,428 22

TOTAL OF DISTRIBUTING PIPES LAID TO JANUARY 31, 1902.—Continued.

LOCATION.	FEET OF CAST IRON PIPE.							FEET OF CEMENT PIPE.				
	3½-in	1-in	1½-in	2-in	4-in	6-in	8-in	10-in	12-in	14-in	16-in	18-in
First street.....	200					355						
Fletcher ".....						2,123			372			
Florence ".....						250						
Florence avenue.....						12						
Folsom ".....						700						
Forrest street.....						710						
Foster ".....						1,240	585					
Frances ".....												
Franklin ".....						161	300	2,040	1,825			
Franklin terrace.....						265						
Frost avenue.....						493						
Garden street.....												
Gibbons ".....						359						
Glen avenue, off Mystic.....						304						
Glen street, off Lynde av.....						330						
Glen road off Vinton street.....												
Gooch street.....		400				29	1,250					
Goodyear avenue.....												
Goss avenue.....						900						
Gould street.....												
Granite street.....						310						
Green street.....						1,595			1043			
Greenleaf place.....												
Greenwood street.....												
Grove street.....						480	4,650					
Grove place.....						265						
Grundy street.....				130		450						
Hancock ".....												
Harvard ".....												
Haverhill place.....			230			520						
Hawes avenue.....						310						
Henry ".....												
Herbert street.....						170						
Hesseltine avenue.....						900						
Heywood ".....						310						
High street, north.....												
High street, south.....				550								
Highland avenue off Main.....				320		1,900						
Hillside avenue.....				580								

TOTAL OF DISTRIBUTING PIPES LAID TO JANUARY 31, 1902.—Continued.

LOCATION.	FEET OF CAST IRON PIPE.								FEET OF CEMENT PIPE.								
	¾-in	1-in	1½-in	2-in	4-in	6-in	8-in	10-in	12-in	14-in	16-in	2-in	4-in	6-in	8-in	10-in	12-in
Oakland street.....														1,161			
Orient avenue.....													1,020				
Orient place.....				220													
Orient park.....				250													
Orris street.....						150								1,300	360		
Orris place.....					165												
Otis street.....						1,165											
Panama ".....																	
Park ".....						134									112		
Parker ".....				400										1,346			
Pearl ".....						900											
Perham avenue.....																	
Perkins street.....				250		111							300				
Pine ".....													400				
Pleasant ".....							1,260										
Porter ".....						250							3,250		750		
Poplar ".....				270		600											
Potter ".....						341							311				
Pratt ".....				120		19							900				
Prospect ".....																	
Ravine road.....						18		35			1,900		620				
Reading Hill avenue.....						170											
Rendall court.....		170													425		
Renwick road.....																	
Richardson road.....						1,000											
Right of Way, off Sibley..									320								
Right of Way, off Ravine rd									1,955								
Rockland street.....						680											
Rogers ".....					16												
Rowe ".....				330		650							1,070				
Russell ".....													1,230				
Rubber works shop...													530				
Sanford street.....					300	320							800				
Sargent ".....						20							530		870		
School ".....				300											950		
Sewall ".....													400				
Sewall Woods road.....					20	900										1,140	

TOTAL OF DISTRIBUTING PIPES LAID TO JANUARY 31, 1902.—Continued.

LOCATION.	FEET OF CAST IRON PIPE.										FEET OF CEMENT PIPE.							
	¾-in	1-in	1½-in	2-in	4-in	6-in	8-in	10-in	12-in	14-in	16-in	2-in	4-in	6-in	8-in	10-in	12-in	16-in
Size of pipe.....																		
Woodland avenue.....					1,500													
Wyoming ".....						600					400							2,900
Wyoming park.....					375									500				
York terrace.....						600												
York terrace, private way to Ferdinand street.....						150												
Yonge street.....						350								1,600				
Totals.....	1,559	1,305	*525	7 208	10,297	62,069	17,477	3,857	10,556	2,920	2,300	2,483	80,090	32,936	1,700	1,200	4,050	2,900

SUMMARY.—Cement, 125,529 feet, or 23.776 miles; Cast Iron, 120,073 feet, or 22.741 miles.

NOTES.—The above includes 5,287 feet of pipe in Stoneham and 290 feet in Wakefield, and excludes 600 feet of service pipe in Renwick Road, Wakefield.

Metropolitan water pipe in Melrose, 1.09 miles of 48 inch iron pipe.

* 175 feet of this is 1¾ inch pipe.

SEWER DIVISION.

Construction.

On July 9, 1901, the board of aldermen passed order No. 1228, appropriating \$15,000.00, and ordering sewers built in the following streets and ways:

Corey place from Grove street about 200 feet.

Henry avenue from Highland avenue to Ashland street.

Howie court " Franklin street " Highland avenue.

Hesseltine avenue from Howard street to " "

Heywood " " Hawes avenue " Damon "

Hawes "

Damon " " Heywood avenue to Frost avenue.

Frost " " Damon " " Hawes "

Boardman " " Main street to brook.

Pearl street " Main " easterly about 900 feet.

Across private land, Boardman avenue to Hesseltine avenue.

Contracts and specifications for doing this work and supplying the materials were prepared, each of which provided that the parties supplying the materials or doing the work, should give to the city a bond with two or more sureties satisfactory to the engineer and superintendent of public works, for the faithful performance of said contract. Advertisements were inserted in the Boston and New York papers, bids received, publicly opened and read at 12 o'clock noon, August 21, 1901, as follows:

CANVASS OF BIDS FOR FURNISHING ABOUT TWO MILES OF
SEWER PIPE.

FIRM NAME AND ADDRESS.	Brand.	Discount Off List. Per cent.	Amount.
Harry Stevens, Melrose, Mass	Granite .	67	\$2,204.85
J. Robbins & Co., 178 Border st., E. Boston	Standard Akron...	67	2,204.85
Waldo Brothers, 102 Milk St., Boston, Mass	Standard Akron...	67	2,204.85
Portland Stoneware Co., 42 Oliver st., Boston	Portland	67	2,204.85
Welteroth Plumbing, Tinning and Heating Co., 329 Washington st., Williamsport, Pa. Received by mail two (2) hours late	Fire Clay	70	2,004.41

CANVASS FOR BIDS FOR FURNISHING 700 BARRELS PORTLAND
CEMENT, F. O. B. MELROSE.

FIRM NAME AND ADDRESS.	Brand.	Price.	Amount.
Windsor Cement Co., 446 Albany st., Boston, Mass.....	{ Northampton . Catskill..... Vulcan	\$1.70 1.80 1.90	\$1,190 1,260 1,330
James A. Davis & Co., 92 State st., Boston, Mass.....	Alpha or Lehigh.	1.76	1,232
J. Robbins & Co., 178 Border st., E. Boston, Mass.....	Atlas	1.68	1,176
Waldo Brothers, 102 Milk St., Boston, Mass.....	{ Atlas	1.68	1,176
	{ Anchor-Brooks		
	{ Shoobridge & Co	2.61	1,827

CANVASS OF BIDS FOR FURNISHING 210,000 BRICK ON THE WORK.

FIRM NAME AND ADDRESS.	Price per M.	Amount.
J. Robbins & Co., E. Boston, Mass.....	\$8.00	\$1,680

NOTE.—Bid presented by N. E. Brick Co., but not received, as the proposal contained prices not asked for and was therefore informal.

CANVASS OF BIDS FOR FURNISHING CASTINGS.

ITEMS.	Osgood & Witherly, Charlestown, Mass.		F. A. Houdlette & Son, 139 Milk Street, Boston.		Chelmsford Foundry Co., 177 Devonshire Street, Boston.		*Co-operative Foundry, Detroit, Michigan.	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
5 sets M. H. castings...	\$8.00	\$40.00	\$9.75	\$48.75	\$10.70	\$53.50	\$10.00	\$50.00
35 M. H. covers.....	2.55	89.25	3.25	113.75	3.75	131.75	3.40	119.00
48 C. B. traps.....	4.50	202.50	6.75	303.75	7.50	337.50	6.00	270.00
45 C. B. covers.....	1.85	83.25	1.90	85.50	2.25	101.25	2.00	90.00
6,746 lbs. specials.....	.02 $\frac{1}{4}$	151.78	.02 $\frac{3}{4}$	177.08	.03 $\frac{1}{2}$	236.11	.02 $\frac{3}{4}$	185.52
Totals .....	.....	\$566.78	.....	\$728.83	.....	\$859.61	.....	\$714.52

*Bid received by mail morning of the 21st inst.

CANVASS OF BIDS FOR SEWER CONSTRUCTION, OPENED AUGUST 21, 1901.

ITEMS.				Quantities.	H. A. Hanson Co., 53 State Street, Boston, Mass.		C. E. Trumbull & Co., Tremont Bld'g, Boston, Mass.		Seymour & Newell, Springfield, Mass.		Fred E. Ellis, Melrose, Mass.	
					Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
a.	Earth ex.	0 to 8 ft.	.....	7,582 cu. yds	\$1.00	\$7,582.00	.65	\$4,928.30	\$.63	\$4,776.66	\$.88	\$6,672.16
b.	" "	8 " 12 "	.....	1,117 "	2.00	2,234.00	1.00	1,117.00	.945	1,055.56	.98	1,094.66
c.	" "	12 " 16 "	.....	303 "	2.50	757.50	1.75	530.25	1.35	409.05	1.08	327.24
d.	" "	16 " 20 "	.....	56 "	3.00	168.00	1.75	98.00	1.89	105.84	1.18	66.08
e.	" "	20 " 26 "	.....	5 "	3.00	15.00	2.00	10.00	2.16	10.80	1.30	6.50
f.	" "	26 " 32 "	.....	5 "	3.00	15.00	2.00	10.00	2.16	10.80	1.50	7.50
g.	rock	" 0 " 8 "	.....	25 "	4.00	100.00	6.00	150.00	3.00	75.00	4.50	112.50
h.	" "	8 " 12 "	.....	50 "	5.00	250.00	8.00	400.00	6.00	300.00	5.50	275.00
i.	" "	12 " 16 "	.....	5 "	7.00	35.00	10.00	50.00	6.00	30.00	7.50	37.50
j.	" "	16 " 20 "	.....	1 "	8.00	8.00	10.00	10.00	6.00	6.00	10.00	10.00
k.	" "	20 " 26 "	.....	1 "	10.00	10.00	10.00	10.00	6.00	6.00	10.00	10.00
l.	" "	26 " 32 "	.....	1 "	10.00	10.00	10.00	10.00	6.00	6.00	10.00	10.00
m.	Brick masonry	.....		94 "	5.00	470.00	5.50	517.00	5.50	517.00	5.00	470.00
n.	Concrete masonry	.....		25 "	5.00	125.00	4.00	100.00	4.50	112.50	4.00	100.00
nn.	Rubble-stone masonry	.....		1 "	4.00	4.00	6.00	6.00	6.00	6.00	4.00	4.00
o.	Belgian blk. paving	.....		7,700 ft.	40.00	308.00	40.00	308.00	40.00	308.00	3.00	.....
p.	spr. lumber pl. and sec.	.....		7,700 lin. ft.	.30	2,310.00	.20	1,540.00	.35	2,695.00	.15	1,155.00
q.	piles in place	.....		895 "	.10	89.50	.25	223.75	.10	89.50	.05	44.75
r.	6 inch pipe	.....		2,420 "	.15	363.00	.25	605.00	.10	242.00	.06	145.20
s.	8 "	.....		3,820 "	.20	764.00	.25	955.00	.10	382.00	.07	267.40
t.	10 "	.....		2 "	.20	.40	.25	.50	.10	.20	.08	.16
u.	12 "	.....		2 "	.20	.40	.25	.50	.10	.20	.08	.16
v.	15 "	.....		2 "	.25	.50	.25	.50	.10	.20	.08	.16
w.	18 "	.....		2 "	.35	.70	.25	.50	.10	.20	.08	.16
x.	5 " for chimneys	.....		2 "	.10	.20	.25	.50	.10	.20	.30	.60
y.	Underdrain 4, 5, 6, 8, 10"	.....		4,345 "	.20	869.00	.25	1,086.25	.20	869.00	.15	651.75
Totals.				.....	.....	\$16,488.80	.....	\$12,606.55	.....	\$12,013.51	.....	\$11,776.32

SCHEDULE OF BIDS ACCEPTED AND CONTRACTS EXECUTED.

MATERIAL.	Name of Firm.	Address.
Sewer pipe	Harry Stevens	Melrose, Mass.
Portland cement	J. Robbins & Co.	East Boston, Mass.
Rosendale cement ...	J. Robbins & Co.	" " " "
Brick	J. Robbins & Co.	" " " "
Castings	Osgood & Witherly	Charlestown, Mass.

All of the above contracts have been acceptably performed and completed. The bid of the Welteroth Plumbing, Tinning & Heating Co., of Williamsport, Pa., for supplying sewer pipe was lower than any other, but was received after the other bids were opened, and owing to a clause in the notice inserted in the advertisements which reads "Sealed proposals.....will be receiveduntil 12 o'clock noon, Aug. 21, 1901, at which time and place all persons competing are invited to be present. The proposals will then be opened and read and *no proposals will be received* after the aforesaid time and date except upon the rejection of all the proposals then presented," it was not considered.

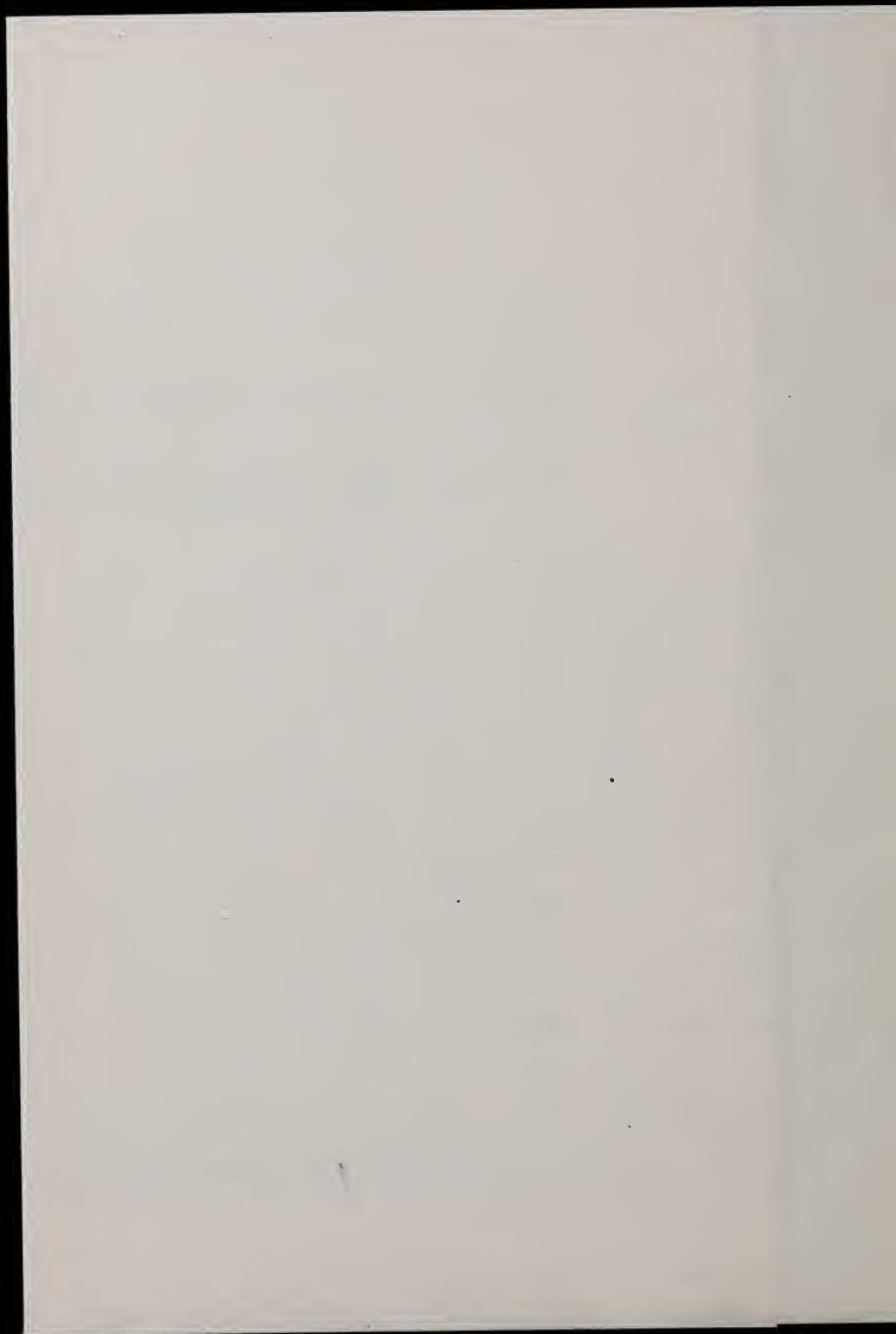
The bid of F. E. Ellis of Melrose for doing the work was accepted and a contract entered into. The amount of his bond was fixed at \$3,000.00 and the American Surety Co. of New York accepted as surety. The work is still in progress and expected to be completed about June 1, next. The amount of work done to date, and on which he has been paid 80 per cent., follows:

SEWER CONSTRUCTION.

Under Contract with Fred E. Ellis of Melrose, Mass. (Dated Aug. 31, 1901.)

ESTIMATES OF QUANTITIES TO FEBRUARY 1, 1902.

STREETS SEWERED.	a		b		c		d		g		h		i		j		m		n		p		q		r		s		t		u		x		y		aa		bb	Totals.	
	Earth Excavation, 0-8 ft.		Earth Excavat'n, 8-12 ft.		Earth Exca., 12-16 ft.		Earth Exca., 16-20 ft.		Rock Excavat'n, 0-8 ft.		Rock Exca't'n, 8-12 ft.		Rock Exca't'n, 12-16 ft.		Rock Exca't'n, 16-20 ft.		Brick Masonry.		Concrete Masonry.		Spruce Lumber Plac'd & Sec'r'd		Piles.		6 in. Pipe.		8 in Pipe.		10 in. Pipe.		12 inch Drain.		Chimneys.		Underrain.		Sheeting left in		Extra Work.		
	Cubic Yards.	Amount @ 88c.	Cubic Yards.	Amount @ 98c.	Cubic Yards.	Amt. @ \$1.08	Cubic Yds. @	Amt. @ \$1.18	Cubic Yds. @	Amt. @ \$4.50	Cubic Yds. @	Amt. @ \$5.50	Cubic Yds. @	Amt. @ \$7.50	Cubic Yds. @	Amt. @ \$10.00	Cubic Yds.	Amt. @ \$5.00	Cubic Yds. @	Amt. @ \$4.00	M ft. B. M.	Amt. @ \$40.00	Linear feet.	Amt. @ 15c.	Linear feet.	Amt. @ 5c.	Linear feet.	Amount @ 6c.	Linear feet.	Amount @ 7c.	Linear feet.	Amt. @ 8c.	Vertical feet.	Amt. @ 30c.	Linear feet.	Amt. @ 15c.	M feet Brick Mas'ry.	Amt. @ \$13.00	Cost + 15 %		
Boardman av., E..	212.07	\$186.62	1.22	\$1.195													1.08	\$9.00									254	\$15.24							254	\$38.10				251.055	
Boardman av., W.	574.85	505.87	16.63	16.30					4.96	\$22.32	1.16	\$6.38					4.935	24.675									200	12.00	454	\$31.78					534	80.10				699.425	
Damon av.....	189.90	167.11															2.16	10.80									276	16.56							270	40.50				234.970	
Frost av.....	391.90	344.87	2.44	2.39					2.70	12.15							2.36	11.80									494	29.64							494	74.10				474.950	
Hawes av.....	455.58	400.91	13.33	12.06													2.50	12.50			3.298	\$131.92	1,494	\$224.10						518	30.26					270	40.50				859.250
Henry av.....	519.20	456.90	85.80	84.08	6.22	\$6.72			54.80	246.60	41.55	228.52	3.55	\$26.63			9.39	46.95	2.33	\$9.32							655	39.30					28	8.40	100	15.00				1,168.420	
Hesseltine av..	308.04	271.07	146.44	143.51	117.22	126.60	16.15	\$19.06	3.07	13.81	9.07	49.88	32.11	240.82	47.44	\$474.40			3.11	12.44									260	18.20			85	25.50	263	39.45				1,434.740	
Heywood av.....	303.23	346.04															5.70	28.50			4.834	193.36	3,295	494.25					511	35.77					442	66.30	2,720	\$35.36			1,109.580
Howie court.....	465.25	469.42	2.71	2.65					24.00	108.00							3.66	18.30							044	\$32.20													\$7.04	577.610	
Pearl st., E.....	350.60	308.58	34.74	34.04					8.44	37.98	13.44	73.92					6.11	30.55											404	28.28					444	66.60				579.950	
Pearl st., W.....	454.73	400.16	24.04	23.56					17.69	79.605							3.17	15.85									550	33.00							275	41.25				593.425	
Right of Way.....	477.36	420.08	8.98	8.80													0.225	46.125											64	45.43					649	97.35	9,088	118.14	22.10		758.025
Richardson road.	142.50	125.40							5.00	22.50																														157.050	
Henry av., (drain).	26.00	22.88							2.00	9.00							1.55	7.75														52	\$4.16							43.790	
Totals.....	4,961.27	\$4,365.91	336.33	\$329.58	123.44	133.32	16.15	\$19.06	122.66	\$551.96	65.22	\$358.70	35.66	\$267.45	47.44	\$474.40	52.74	\$263.70	5.44	\$21.76	8,132	\$325.28	4,789	\$718.35	839	\$41.95	2,429	\$145.74	2,706	\$195.72	52	\$4.10	113	\$33.90	3,995	\$599.25	11,808	153.50	\$29.14	\$0,032.840	



SEWERS BUILT TO FEBRUARY 1, 1902.

Size Pipe.	LENGTH IN FEET.							Totals.
	1894	1895	1896	1897	1898	1899	1900	
Inches.								
6	14,003.16	20,411.66	26,179.93	22,916.40	2,512.00	4,662.40	839	91,525.55
8	5,439.89	8,020.03	15,505.79	11,817.90	1,424.00	1,530.10	2,429	46,166.71
10	1,508.02	4,968.55	2,152.38	2,946.60	.....	1,067.00	2,796	15,438.55
12	949.95	1,250.69	2,407.62	5,672.64	.....	.....	.....	10,280.90
15	354.80	.....	.....	3,121.73	.....	.....	.....	3,476.53
18	2,715.07	.....	317.46	2,117.10	.....	.....	.....	5,149.83
20	2,788.30	.....	.....	.....	.....	.....	.....	2,788.30
24	1,213.10	.....	.....	.....	.....	.....	.....	1,213.10
Brick								
20x18	.....	.....	.....	3,034.94	.....	.....	.....	3,034.94
20	111.00	.....	.....	.....	.....	.....	.....	111.00
24	28.00	.....	.....	.....	.....	.....	.....	28.00
Totals	29,112.29	34,650.93	46,563.38	51,627.31	3,936.00	7,259.50	6,064	179,213.41

NOTE.—Total length of sewers, 179,213.41 feet, or 33.94 miles, 2.4 miles of which are owned and controlled by the Commonwealth of Massachusetts, but by an act of the legislature Melrose is permitted to use in the same manner as the local sewers.

STATEMENT OF RECEIPTS AND EXPENDITURES.

Balance Feb. 1, 1901,	\$ 477 79
Appropriation, (order 1228),	15,000 00
“ deficiency transferred from main- tenance,	996 31
Cash receipts paid to treasurer,	236 75
“ “ for stock furnished highway main- tenance,	149 52
Cash receipts for stock furnished highway C. B. and drain,	355 03
Cash receipts for stock furnished highway bridge and culvert,	163 20
Cash receipts for stock furnished surface drain- age,	2,799 94
Amount carried forward,	\$20,178 54

LIST OF BUILDINGS ON LINE OF SEWERS.

LOCATION.	Number of Buildings.	Connected.	Not Connected.	LOCATION.	Number of Buildings.	Connected.	Not Connected.
Adams street.....	23	21	2	Eighth street.....	5	5	...
Ainsworth place.....	2	2	...	Elliott street.....	3	...	3
Allen place.....	8	8	...	Elm street.....	16	15	1
Albion street.....	17	8	9	Ellsworth avenue.....	9	7	2
Appleton ".....	5	3	2	Emerson street.....	93	83	10
Apthrop road.....	1	1	...	Emerson place.....	4	4	...
Ashland street.....	26	16	10	Essex street.....	33	21	12
Ashmont ".....	8	7	1	Everett ".....	10	9	1
Ashmont park.....	4	2	2	Fairmount street.....	16	4	12
Auburn street.....	10	7	3	Farwell avenue.....	2	2	...
Avon ".....	6	6	...	Faulkner place.....	7	5	2
Bartlett ".....	9	9	...	Faxon street.....	2	1	1
Batchelder street.....	15	15	...	Felton place.....	2	2	...
Baxter street.....	20	19	1	Fields court.....	4	4	...
Beech avenue.....	20	7	13	First street.....	33	23	10
Bellevue avenue.....	30	29	1	Fletcher street.....	2	2	...
Belmont street.....	4	3	1	Florence street.....	33	28	5
Berwick ".....	9	8	1	Florence avenue.....	4	1	3
Beverly ".....	8	8	...	Foster street.....	91	80	11
Botolph ".....	15	12	3	Frances ".....	12	12	...
Briggs ".....	3	2	1	Franklin ".....	88	67	21
Brown ".....	1	1	...	Franklin terrace.....	6	5	1
Brunswick park.....	3	3	...	Garden street.....	6	4	2
Belmont place.....	4	4	...	Gibbons ".....	2	1	1
Berwick ".....	1	1	1	Glen avenue.....	4	1	3
Brunswick way.....	1	1	...	Gooch street.....	15	13	2
Cass street.....	4	4	...	Goss avenue.....	8	3	5
Cedar park, N. E.....	14	12	2	Gould street.....	6	6	...
Cedar park, S.....	5	4	1	Green ".....	43	36	7
Central terrace.....	5	5	...	Greenwood street.....	16	12	4
Chestnut street.....	8	7	1	Grove street.....	93	75	18
Charles ".....	7	6	1	Grove place.....	4	4	...
Chipman avenue.....	6	2	4	Grundy street.....	4	4	...
Chestnut park.....	5	4	1	Harvard ".....	6	5	1
Chester street.....	11	11	...	Henry avenue.....	6	1	5
Cherry ".....	4	3	1	Herbert street.....	6	6	...
Circuit ".....	11	11	...	High " N.....	9	8	1
Cleveland ".....	28	26	2	High " S.....	9	9	...
Cliff ".....	1	...	1	Highland avenue.....	24	20	4
Clifton park.....	2	...	2	Hillside avenue.....	18	17	1
Cottage street.....	25	23	2	Holbrook court.....	7	5	2
Crescent avenue.....	31	20	11	Howard street.....	14	8	6
Crescent place.....	6	6	...	Howie Court.....	9	6	3
Crystal street.....	5	4	1	Hurd street.....	9	8	1
Cutter ".....	9	9	...	Ingalls court.....	3	3	...
Day street.....	0	0	0	Irving street.....	13	2	11
Dell avenue.....	18	12	6	Kimball court.....	3	1	2
Dills court.....	5	3	2	Lake avenue.....	19	16	3
Eastman place.....	2	2	...	Larrabee street.....	1	...	1

LIST OF BUILDINGS ON LINE ON SEWERS.—Continued.

LOCATION.	Number of Buildings.	Connected.	Not Connected.	LOCATION.	Number of Buildings.	Connected.	Not Connected.
Larrabee place.....	3	2	1	Rowe street.....	28	20	8
Laurel street.....	20	15	5	Russell ".....	13	9	4
Lebanon street.....	64	59	5	Sanford ".....	14	14	..
Linden street.....	7	2	5	Sargent ".....	29	23	6
Linden " W.....	6	3	3	Sewall ".....	8	7	1
Linden place.....	5	3	2	Sewall Woods road....	2	1	1
Linwood avenue.....	27	24	3	Short street.....	2	2	..
Lynde street.....	34	27	7	South avenue.....	10	5	5
Main street.....	165	137	28	Stevens place.....	7	7	..
Malvern street.....	20	11	9	Summer street.....	16	10	6
Maple ".....	30	26	4	Summit avenue.....	5	4	1
Melrose ".....	39	27	12	Tappan street.....	20	19	1
Melrose place.....	6	4	2	Tremont ".....	46	26	20
Meridian street.....	12	10	2	Trenton ".....	41	58	3
Mt. Vernon street....	8	6	2	Upham ".....	49	43	6
Mt. Vernon avenue..	7	6	1	Vine ".....	11	10	1
Myrtle street.....	39	38	1	Vinton ".....	49	31	18
Mystic avenue.....	17	15	2	Walnut ".....	1	1	..
North ".....	9	6	3	Walton park.....	24	8	16
Oakland street.....	16	13	3	Warren street.....	9	6	3
Orient avenue.....	9	6	3	Warwick road.....	5	3	2
Orient place.....	4	4	..	Washington street....	16	9	7
Orris street.....	16	12	4	Waverly place.....	14	14	..
Otis street.....	16	15	1	West Hill avenue.....	10	3	7
Parker street.....	7	6	1	Whitman avenue.....	3	3	..
Perham avenue.....	4	4	..	Whittier street.....	18	17	1
Perkins street.....	5	3	2	Willow ".....	8	7	..
Pine ".....	5	2	3	Winter ".....	3	3	..
Pleasant ".....	21	15	6	Winthrop ".....	18	13	5
Porter ".....	14	14	..	Winthrop place.....	7	1	6
Poplar ".....	8	6	2	Woodland avenue.....	12	6	6
Potter ".....	1	1	..	Wyoming ".....	50	47	3
Pratt ".....	7	7	..	Wyoming park.....	1	1	..
Prospect ".....	41	3	8	York terrace.....	8	4	4
Rendall court.....	2	2	..	Youle street.....	18	15	3
Richardson road.....	6	1	5				
Rockland street.....	11	7	4				
				Totals.....	2564	2013	551

SUMMARY OF ALL PRIVATE SEWERS CONSTRUCTED
TO FEBRUARY 1, 1902.

YEAR.	Total Length in Miles.	Average cut in ft.	Average cost per ft.	Excavation.		Cost per cu. yd.	
				Earth, cu. yds.	Rock, cu. yd.	Earth.	Rock.
1895	2.096	6.33	\$0.4845	7,736.00	.....	\$0.441	.....
1896	4.042	6.03	0.4543	14,303.00	190.2	0.377	4.50
1897	2.966	6.07	0.3933	10,557.00	35.0	0.387	4.50
1898	2.073	5.56	0.45	6,663.71	101.5	0.444	2.90
1899	4.349	5.83	0.4589	14,684.00	196.7	0.380	4.00
1900	2.480	5.88	0.4609	8,541.00	85.0	0.413	4.50
1901	1.083	5.88	0.4746	2,595.00	135.0	0.4794	4.50
Totals	19.089	5.94	\$0.4538	65,079.71	743.4	\$0.4173	4.15

Item 1.—Constructed in 1901.....112

Item 2.—Connected with state sewer.. 6

(Item 1 includes item 2.)

Total cost of labor charged to abutters and charge for cleaning, \$1851.78

NOTE.—1901 Summary: Account Nos. 1765, 1766, 1906 and 1929-2040 inclusive, omitting Nos. 1979, 1968, 2001, 2038.

CLASSIFIED LIST OF ALL BUILDINGS CONNECTED WITH
THE PUBLIC SEWERS FEBRUARY 1, 1902.

DESCRIPTION.	1895	1896	1897	1898	1899	1900	1901	Totals.
Single houses.....	164	362	264	181	400	239	100	1710
Double houses.....	26	47	31	20	37	13	6	180
Blocks, stores and tenements.....	17	18	10	5	13	6	3	72
Tenement blocks of 4 or more tenants.....	3	0	11	4	7	0	2	27
Churches.....	3	1	0	0	0	1	0	5
Club houses.....	1	0	0	0	0	0	0	1
Public buildings.....	1	5	4	3	0	0	0	13
Hospital.....	1	0	0	0	1	0	0	2
Railroad stations.....	1	1	0	2	0	0	0	4
Fire stations.....	1	0	0	1	0	0	0	2
Mills.....	0	1	1	1	0	0	0	3
Hotels and boarding houses.....	1	1	0	1	0	0	0	3
Stables.....	1	0	1	0	1	0	1	4
Private schools.....	0	0	0	0	0	1	0	1
Laundry.....	0	0	0	0	0	1	0	1
Totals.....	220	436	322	218	459	261	112	2028

NOTE.—The 1901 total connections includes Accounts Nos. 1765, 1766, 1906 and 1929 to 2039 each inclusive and omits Accounts Nos. 1979 and 2001 which were cancelled, and Accounts Nos. 1968 and 2038 applied and paid for but work not done.

Only 112 private sewers have been constructed, which is less than that of any year since the work began (1895). The city has furnished all the labor and supplied all the material at its actual cost, a statement of which is as follows:

W. DABNEY HUNTER,

In account with CITY TREASURER.

DR.

To cash on hand Jan. 1, 1901, (Est.		
Isaac Cochran),	\$30 00	
" actual cost private sewers, 1901, .	2,763 01	
" estimate A. A. Day,	18 00	
" unsettled accounts, 1896, \$	59 89	
" " " 1898,	8 31	
" " " 1899,	35 53	
" " " 1900,	180 70	
" " " 1900,		
(Main street),	152 40	
		436 83
" sundry repairs, 1901,	6 92	
" rebates unpaid,	1 24	
" sewer construction, sundry collec-		
tions,	236 75	
		\$3,492 75

CR.

By cash paid treasurer, account		
private sewers,	\$2,919 60	
By cash paid treasurer, account		
construction,	236 75	
By abatements made by mayor, . .	33 43	
" unsettled accounts, 1900, \$	34 55	
" " " "		
(Main street),	152 40	
By unsettled accounts, 1899, . . .	20 91	
" " " 1896,	59 89	
		267 75
Amounts carried forward,	\$3,457 53	\$3,492 75

Amounts brought forward, . . .	\$3,457 53	\$3,492 75
By cash paid rebates, 1900, . . .	3 98	
By estimate Isaac Cochran, collected and reported, 1900, . . .	30 00	
		3,491 51
Cash on hand,		\$ 1 24

PRIVATE SEWERS.

Amount rec'd and paid to treasurer, July 16, 1901,	\$1,000 00
" " " " " " Oct. 28, 1901,	1,200 00
" " " " " " Jan. 4, 1902,	533 18
" " " " " " Feb. 11, 1902,	186 42
	\$2,919 60

Expended:

Labor as per pay rolls, . . .	\$1,880 26	
Stock from sewer construction acc't,	852 47	
Repairs and sharpening tools, . . .	30 45	
Brick masonry,	10 00	
Powder and exploders,	29 95	
Goodno, labor and stock,	4 60	
H. J. Perry, hardware,	3 00	
Highway teams,	5 35	
Water division, teams and stock, . . .	66	
Concrete work, Hoffman,	10 22	
Recording releases,	8 20	
Oil,	3 78	
		\$2,838 94
Balance in treasury,		\$80 66

SEWER MAINTENANCE.

Labor.

Appropriation,		\$ 800 00
Expended:		
Labor as per pay rolls,	\$390 68	
Amounts carried forward,	\$390 68	\$800 00

Amounts brought forward, . . .	\$390 68	\$800 00
Transferred to deficiency (order 1424)	<u>71 31</u>	461 99
Balance in treasury,		\$338 01

Contingent.

Appropriation,		\$100 00
Expended:		
Repairs, Jos. Edwards,	\$13 89	
" sewer rods and tools,	29 20	
Oil suits,	12 00	
Covers replaced,	4 85	
Rules and regulations and reports,	15 70	
Teams from water divisions,	19 69	
Rope,	97	
Expressage,	<u>55</u>	96 85
Balance in treasury,		3 15
Maintenance deficiency.		
Appropriation,		925 00
Transferred from maintenance labor (order 1424),		<u>71 31</u>

Expended:		
Amount to sewer construction,		\$996 31
Sewer Division Yard Rent.		
Appropriation,		175 00
Expended:		
Paid S. E. Benson half the yearly rent of yard and shed on Tremont street, (\$350 00),		175 00

Maintenance.

The actual amount expended this year as follows:

Rent of yard,	\$175 00	
Labor,	461 99	
Contingent,	<u>96 85</u>	\$733 84

The work of cleaning the sewers consists in pulling a hoe and sometimes a swab or brush through all the pipes and removing all deposit and grease. This work is usually performed in the winter, the balance in the item "labor," which appears in the detail of expenditures of \$338.01, is due to the fact that all of the sewers were not cleaned owing to the severity of the weather.

HIGHWAY DIVISION.

The appropriation for this division was \$5,000.00 larger than for 1900 and has nearly all been expended for repairing with gravel, and but little crushed stone used, by so doing a larger territory was covered, apparently more work done, and better satisfaction given. This, however, is not an economical method to pursue. Work should be well and thoroughly done, but this is not permitted by the very limited appropriation, as all the streets have to be kept in passable condition.

The appropriation as passed in the budget was divided into seven different heads, viz:

Bridges and culverts,	\$1,000 00	
Cleaning crossings,	1,000 00	
Catch-basins and drains,	2,000 00	
General repair and maintenance,	13,900 00	
Paving gutters,	500 00	
Removal of snow and sanding streets,	1500 00	
Trimming and care of trees,	100 00	
		\$20,000 00
There was later appropriated for Park street,	\$500 00	
For general repair and maintenance,	5,000 00	
The excise tax,	1,657 56	
		7,157 56
Total,		\$27,157 56

This sum, together with the receipts or earnings, represents the entire amounts expended on the highways, a detail report of which follows under the head of each separate appropriation.

Bridges and Culverts.

All of the culverts in the city have been examined, cleaned and repaired. The culvert in Wyoming avenue under Spot Pond brook collapsed, and, on investigation, it was found that the side walls had fallen in and the three covering stones were broken, the side walls were rebuilt, the drain cleaned of gravel and rubbish, and two new covering stones put on in place of the three broken.

The culvert under Franklin street, at or near the residence of Dexter Pratt, was taken out and replaced with 15 inch pipe, the one across Tremont street at Ell pond was raised and relaid in connection with other street improvements.

Two new culverts were constructed over what is known as Bennett's pond brook, one at Boardman avenue, and one at Pearl street and were to replace old ones built at the time this territory was developed, covered with green saplings which had decayed and become dangerous and, when taken out, would not hold their own weight. In the construction of the new culverts, future needs were considered, and they were made large enough and, at the same time, constructed to a grade which will permit the future lowering of the brook several feet and allows for the removal of the Bennett's pond dam, and in every way conforms to the system of drainage as adopted by the board of aldermen.

The cost of these culverts was \$792.70 or \$8.81 per ft., or \$1.81 per ft. more than the estimate. This excess was expected on account of the conditions existing at the time the work was done, namely: frost and wet weather. The work could not have been done earlier as it was necessary to wait until after the sewer had been constructed, this delayed the work until late in the fall, when the brook was running nearly full and the ground frozen.

A statement of the receipts and expenditures follows:

Appropriation,	\$1,000 00
Amount paid from highway main- tenance,	16 02
	\$1,016 02



PLATE V. Showing concrete culvert on Boardman Avenue in process of construction.



PLATE VI. Showing concrete culvert on Pearl Street in process of construction.

Expended:

Repairs.

Materials,	\$28 22
Labor as per pay rolls,	36 94
City teams at \$1.25 per horse,	6 86

 \$72 02

Construction.

Tremont Street.

Materials,	\$35 75
Labor as per pay rolls,	30 00
City teams at \$1.25 per horse,	1 87

 \$67 62
Pearl Street.

Materials,	\$158 26
Labor as per pay rolls,	193 88
City teams at \$1.25 per horse,	7 51

 \$359 65
Boardman Avenue.

Materials,	\$158 34
Labor as per pay rolls,	265 96
City teams at \$1.25 per horse,	8 75

 \$433 65

Amount transferred to highways,

(order 1461), 83 68

 \$1,016 02

After the amount \$83.68 was transferred to the appropriation for general repairs and maintenance of highways, bills amounting to \$16.02 were presented and paid from that appropriation, so that the net amount expended on bridges and culverts was \$932.34.

Trimming, Removing and Care of Trees.

This work has consisted in trimming trees on request of abutters and removing dead limbs and trees where reported or discovered. They need a thorough and systematic trimming, and in many places some should be removed in order to permit others to grow properly. It would be a great

improvement if property owners would adopt the practice of setting trees within the lawns instead of on the street.

The number of electric wires (some of which are highly charged) through our streets, and necessarily through our trees, makes this work difficult, dangerous and expensive. Last year one man in the employ of the city lost his life while trimming a tree on the corner of Wyoming avenue and Main street.

STATEMENT OF RECEIPTS AND EXPENDITURES.

Appropriation,	\$100 00
Amount paid out of highway appropriation,	11 50
	\$111 50

Expended:

Invoices and material,	\$ 3 83
Labor as per pay rolls,	65 37
City teams @ \$1.25 per horse,	8 44
	\$77 64

Amount transferred to highways (order 1461),	33 86
	\$111 50

Cleaning Crossings.

Appropriation,	\$1,000 00
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Expended:

Labor as per pay rolls,	\$1,000 00
	\$1,000 00

Catch Basins and Drains.

For some years past the old sleeper drain constructed under the east sidewalk of Cutter street has been gradually falling in and filling up. Early in the spring the heavy rains and freshets flooded the entire territory in this vicinity, and the city joined with the owners and by concerted action partially relieved the difficulty, the city rebuilding that portion within the street and the abutters that portion within private land. Although this drain as rebuilt is not con-

sidered a part of the drainage system, it is believed it will give partial relief to this section for a few years to come, or perhaps until such time as the city can afford to drain the entire Wyoming district. New catch-basins were constructed as follows:

LOCATION.	Material.		Discharge into	Cost.
	C Basin	Cover.		
Berwick street at Ell pond brook.....	Brick	Granite	Berwick st. drain..	\$79.95
Hillside avenue north of Emerson street, near No. 64.....	"	"	Culvert	69.22
Pleasant street near Gould street.....	"	"	Overflow to sewer.	102.02
Main street at Franklin street	"	"	Brook.....	61.57
Upham street at Dell avenue	"	"	Ell Pond brook...	74.86
Tremont street at entrance to Ell pond...	"	"	Swamp	96.19
Tappan street near Baxter street	Stone	Concord grate	Catch basin	23.88
Porter street at Fletcher street in car track ...	Brick	Special grate.	Culvert	53.94

On May 6, 1901, the Board of Aldermen passed an order (No. 1006), directing that certain work be done on Beech avenue, in connection with which a drain, 18 inches in diameter and 62 feet long, four brick catch-basins with granite covers together with inlet connections, etc., were constructed.

An overflow to the drinking-fountain on Main street opposite the city hall was laid and paid for out of this appropriation. On Washington street near Trenton street, 150 feet of 12 inch pipe and 182 feet of 8 inch pipe were laid, four catch-basins (two of brick and two of stone) and one manhole constructed.

All catch-basins and some of the drains have been cleaned, and a number of each repaired; the 12 inch drain in Main street from the Central fire station to Winthrop street, the 12 inch drain in Winthrop street to the stable of W. B. Ellis, and the 12 inch and 10 inch drain in Essex street from

Myrtle to Vine street, were the principal ones repaired. All of these drains were in poor condition, especially the one in Main and Winthrop streets, as appears from the accompanying plate, No. VII, which shows the bend just as it was taken from the trench, and is a sample of the condition of many of our so-called drains.

STATEMENT OF RECEIPTS AND EXPENDITURES.

Appropriation,	\$2,000 00
Amount paid from highway maintenance,	881 91

Expended:

Cleaning Catch Basins.

Labor as per pay rolls,	\$413 43
City teams @ \$1.25 per horse,	25 62
	\$439 05

Repairs.

Labor as per pay rolls,	\$345 96
City teams @ \$1.25 per horse,	36 75
Materials used,	416 82
	799 53

Construction.

Baxter and Cutter Streets.

Labor as per pay rolls,	\$134 70
City teams @ \$1.25 per horse,	11 25
Materials used:—248 feet 12 inch pipe, 2 12 inch ys., 24 feet 18 inch pipe, 2 18 inch ys, 6 feet 15 inch pipe, 1 15 inch y, 86 feet 8 inch pipe, 44 feet 5 inch pipe, ½ cask Portland, 2 Rosendale cement, 50 brick, 9 loads crushed stone, 10 loads gravel, 2 C. B. covers, 1 M. H. casting,	129 20
	275 15

Amounts carried forward,	\$1,513 73	\$2,881 91
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PLATE VII. Showing 12 inch bend entirely filled with roots and deposit. Taken out junction of Main and Winthrop Sts.

Amounts brought forward, . \$1,513 73 \$2,881 91

Berwick Street.

Labor as per pay rolls,	\$21 40	
City teams @ \$1.25 per horse,	5 00	
Material used:—1 set C. B.		
stone and fixtures, 1125		
brick, 1 M. H. rod, 4 feet		
15 inch pipe, 1 15 inch		
y, 4 feet 8 inch pipe, 2		
casks cement,	53 55	
		79 95

Beech Avenue.

Labor as per pay rolls,	\$172 40	
City teams @ \$1.25 per horse,	2 50	
Material used:—118 feet 8		
inch pipe, 1 10 inch y,		
26 feet 10 inch pipe, 62		
feet 18 inch pipe, 2 feet		
15 inch pipe, 12 feet 5		
inch pipe, 4 sets C. B.		
stone and fixtures, 1 M.		
H. casting, 15 rods, 17		
casks Portland cement,		
6640 bricks,	287 11	
		462 01

Hillside Avenue.

Labor as per pay rolls,	\$16 35	
City teams @ \$1.25 per horse,	1 88	
Material used:—1 set C. B.		
stone and fixtures, 3 M.		
H. rods, 1350 brick, 3		
bbls. Portland cement,	50 99	
		69 22
Amounts carried forward,	\$2,124 91	\$2,881 91

Amounts brought forward, . \$2,124 91 \$2,881 91

Main Street, City Hall Fountain.

Labor as per pay rolls, . \$24 23

Material used:—70 feet 8 inch

pipe, 1 bend, 1 tee, 116

feet 6 inch pipe, 1 y, 1

tee, 18 feet 5 inch pipe,

1 bend, 25 38

49 61

Pleasant Street.

Labor as per pay rolls, . \$42 30

City teams @ \$1.25 per horse, 31

Material used:—54 feet 8

inch pipe, 1 12 inch y,

4 casks Rosendale ce-

ment, 1 cask Portland

cement, 1200 brick, 7

loads C. stone, 2 loads

sand, 3 M. H. rods, 1 set

C. B. stone and fixtures, 59 41

102 02

Main Street, corner Franklin.

Labor as per pay rolls, . \$20 50

City teams @ \$1.25 per horse, 1 25

Material used:—9 feet 8

inch pipe, 4 bbls. Rosen-

dale cement, 900 brick,

3 M. H. rods, 1 C. B.

stone and fittings, . 39 82

61 57

Upham Street.

Labor as per pay rolls, . \$19 15

City teams @ \$1.25 per horse, 94

Amts. carried forward, \$20 09 \$2,338 11 \$2,881 91

Amts. brought forward,	\$20 09	\$2,338 11	\$2,881 91
Material used:— 1 set C. B. stone and fittings, 4 M. H. rods, 1450 brick, 4 casks Portland cement,	54 77		
		74 86	

Washington Street.

Labor as per pay rolls,	\$132 66		
City teams @ \$1.25 per horse,	13 75		
Material used:— 150 feet 12 inch pipe, 1 12 inch y, 182 feet 8 inch pipe, 7 loads crushed stone 2 sets C. B. stone and fit- tings, 3 M. H. rods, 12 casks Portland, 11 Ros- endale cement, 4150 brick, 4 loads sand,	148 52		
		294 93	

Tremont Street.

Labor as per pay rolls,	\$45 25		
Material used:— city teams @ \$1.25 per horse, 36 feet 8 inch pipe, 5 bbls. Port- land cement, 1 bbl. Ros- endale, 1025 brick, 2 M. H. rods, 1 set C. B. stone and fixtures,	50 94		
		96 19	

Tappan Street.

Labor as per pay rolls,	\$14 16		
City teams @ \$1.25 per horse,	1 25		
Material used:— 28 feet 8 inch pipe, 2 feet 10 inch pipe, 1 10 inch y, 3 loads stone, 1 Concord casting,	8 47		
		23 88	
Amounts carried forward,		\$2,827 97	\$2,881 91

Amounts brought forward, . \$2,827 97 \$2,881 91

Porter Street.

Labor as per pay rolls, .	\$23 93		
Material used:—1 M. H.			
frame and grating, 2			
rods, 6 feet 8 inch pipe,			
4 casks Portland cement,			
850 brick,	30 01		
		53 94	
		\$2,881 91	\$2,881 91

PAVING GUTTERS.

No work done by the highway division is of more lasting benefit than the paving of gutters. Much more of this work has been done the past season than in the former years, a detail of which follows:

Appropriation,	\$500 00
Amount paid from high-	
way maintenance,	591 10

Expended:

Botolph Street.

Labor as per pay rolls, .	\$41 10	
City teams @ \$1.25 per horse, .	3 75	
Material used:—19 loads		
paving, 4 loads sand, 3		
loads gravel,	11 80	
		\$56 65

West Hill Avenue.

Labor as per pay rolls, .	10 00	
City teams at \$1.25 per horse, .	62	
		10 62
Amounts carried forward, .	\$ 67 27	\$1,091 10

Amounts brought forward, . \$67 27 \$1,091 10

York Terrace.

Labor as per pay rolls, .	\$74 12	
City teams @ \$1.25 per horse, .	7 50	
Material used:—14 loads		
paving, 5 loads sand,		
242.8 sq. yds. paving on		
three streets, . . .	9 50	
		91 12

Chipman Avenue.

Labor as per pay rolls, .	\$5 00	
City teams @ \$1.25 per horse, .	63	
Material used:—4 loads		
paving, 2 loads sand, 45		
sq. yds. paving, . . .	3 00	
		8 63

Crescent Avenue.

Labor as per pay rolls, .	\$15 25	
City teams @ \$1.25 per horse, .	2 97	
Material used:—8 loads		
sand, 44 $\frac{3}{8}$ sq. yds. paving,	4 00	
		22 22

Emerson Street, East and West.

Labor as per pay rolls, .	\$83 00	
City teams @ \$1.25 per horse, .	13 13	
Material used:—30 loads		
paving, 20 loads gravel,		
300 blk. paving, 33.8 sq.		
yds. new, 183 $\frac{3}{8}$ sq. yds.		
repairs,	40 00	
		136 13

Foster Street, East.

Labor as per pay rolls, .	\$41 50	
City teams @ \$1.25 per horse, .	6 87	
Amts. carried forward, .	\$48 37	\$325 37 \$1,091 10

Amts. brought forward,	\$48 37	\$325 37	\$1,091 10
Material used:—21 loads			
paving, 2 loads sand, 72			
sq. yds. new work, 73 $\frac{1}{2}$			
sq. yds. repairs, . . .	11 50		
		59 87	

First Street.

Labor as per pay rolls, . .	\$32 00		
City teams @ \$1.25 per horse,	5 00		
Material used:—10 loads			
paving, 6 loads sand, 89			
sq. yds. paving, repairs,	\$8 10		
		45 10	

Franklin Street.

Labor as per pay rolls, . .	\$5 00		
City teams @ \$1.25 per horse,	62		
Material used:—1 load sand,			
repairs,	50		
		6 12	

Lynde Street.

Labor as per pay rolls, . .	\$8 00		
City teams @ \$1.25 per horse,	1 25		
Material used:—3 loads			
paving, 2 loads sand, 16			
sq. yds. paving, . . .	2 50		
		11 75	

Main Street at Green Street.

Labor as per pay rolls, . .	\$2 00		
City teams @ \$1.25 per horse,	31		
		2 31	

Malvern Street.

Labor as per pay rolls, . .	\$37 25		
City teams @ \$1.25 per horse,	4 37		
Material used:—5 loads			
paving, 12 loads sand,			
155 $\frac{3}{4}$ sq. yds. paving, . .	8 50		
		50 12	

Amounts carried forward, . .	\$500 64	\$ 1,091 10
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Amounts brought forward, . \$500 64 \$1,091 10

North Avenue.

Labor as per pay rolls, .	\$9 00	
City teams @ \$1.25 per horse, .	1 88	
Material used:—4 loads paving, 2 loads sand, 10 sq. yds. paving at stand-pipe,	3 00	
		13 88

Oakland Street.

Labor as per pay rolls, .	\$20 00	
City teams @ \$1.25 per horse, .	2 50	
Material used:—7 loads paving, 5 loads sand, 55 sq. yds. paving, repairs,	6 00	
		28 50

Poplar Street.

Labor as per pay rolls, .	\$5 00	
City teams @ \$1.25 per horse, .	62	
Material used:—3 loads paving, 1 load sand,	2 00	
		7 62

Richardson Road.

Labor as per pay rolls, .	\$16 00	
City teams @ \$1.25 per horse, .	2 50	
Material used:—4 loads paving, 4 loads sand, 45 sq. yds. paving,	4 00	
		22 50

Swain's Pond Avenue.

Labor as per pay rolls, .	\$11 75	
City teams @ \$1.25 per horse, .	1 25	
Material used:—8 loads paving, 4 loads sand, 21½ sq. yds. paving, new,	6 00	
		19 00

Amounts carried forward, .	\$592 14	\$1,091 10
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Amounts brought forward, . \$592 14 \$1,091 10

Upham Street.

Labor as per pay rolls, .	\$102 25	
City teams @ \$1.25 per horse,	15 01	
Material used:—36 loads		
paving, 21 loads sand,		
250 block paving, 339 $\frac{1}{2}$		
sq. yds. paving repairs,	36 10	
		153 36

Upham Street at Fountain.

Labor as per pay rolls, .	\$5 00	
City teams @ \$1.25 per horse,	63	
Material used:—100 block		
pavings,	5 00	
		10 63

Vinton Street.

Labor as per pay rolls, .	\$29 00	
City teams @ \$1.25 per horse,	4 37	
Material used:—9 loads pav-		
ing, 8 loads sand, 6 loads		
gravel, 74 sq. yds. pav-		
ing, repairs,	9 10	
		42 47

Washington Street at Trenton Street.

Labor as per pay rolls, .	\$153 72	
City teams @ \$1.25 per horse,	20 00	
Material used:—38 loads		
paving, 56 loads sand,		
269.5 sq. yds. new work,	47 00	
		220 72

Washington Street at Standpipe.

Labor as per pay rolls, .	\$10 00	
City teams @ \$1.25 per horse,	1 25	
10 sq. yds. paving, repairs,		
		11 25
Amounts carried forward, .	\$1,030 57	\$1,091 10

Amounts brought forward,. . . \$1,030 57 \$1,091 10

Walton Park.

Labor as per pay rolls,	\$12 00	
City teams @ \$1.25 per horse,	1 88	
Material used:—6 loads paving, 4 loads sand, $21\frac{3}{4}$ sq. yds. paving,	5 00	
		18 88

Winter Street.

Labor as per pay rolls,	\$18 00	
City teams @ \$1.25 per horse,	2 50	
Material used:—7 loads paving, 8 loads sand, $63\frac{5}{8}$ sq. yds. paving, repairs,	7 50	
		28 00

Youle Street.

Labor as per pay rolls,	\$10 00	
City teams @ \$1.25 per horse,	1 25	
Material used:—3 loads paving, 1 load sand, 4 loads gravel, $9\frac{5}{8}$ sq. yds. paving,	2 40	
		13 65
Total,		\$1,091 10

From the foregoing it will appear that 1,875 sq. yds. of cobble paving was laid at an expense of \$1,091.10, or \$.58 per sq. yd.

Removal of Snow and Sanding Walks.

Notwithstanding the small amount of snow the past year, the appropriation of \$1,500.00 was insufficient for the work.

Appropriation,	\$1,500 00
Amount paid from highway appropriation,	309 81
Amount carried forward,	\$1,809 81

Amount brought forward,	.	.	.	\$1,809 81
Expended:				
Material and repairs to plows,	.	\$	126 84	
Labor as per pay rolls,	.	.	1,429 94	
City teams @ \$1.25 per horse,	.	.	253 03	
Stock, 242 loads of sand.				
			\$1,809 81	\$1,809 81

Special Appropriation, Park Street.

On May 24th, 1901, the board of aldermen passed an order (No. 1009), directing that certain work be done on Park street, and appropriated \$500.00 to pay the expense of the same, which was entirely inadequate, as appears from the statement of cost appended.

The work was completed and the balance paid from the appropriation for general repairs and maintenance of highways.

Appropriation,	.	.	.	\$ 500 00
Amount paid from high-				
way maintenance,	.	.	.	1,104 80

Expended:

Material, rolling and steam				
drill,	.	.	.	\$623 10
City teams @ \$1.25 per horse,				67 97
Labor as per pay rolls,	.	.	.	913 73
Steam roller and drill 16½				
days, 24 loads pavings,				
33 loads sand, 4½ casks				
cement, 336 loads gravel,				
128 feet lumber, powder				
and exploders.				
Cost of ledge work,	.	.	\$370 26	
" " street "	.	.	504 85	
" " paving	.	.	161 00	
" " guard rail	.	.	138 85	
" " retaining wall	.	.	429 84	
			\$1,604 80	\$1,604 80
				\$1,604 80



PLATE VIII. Showing Telford Road and Roller on Tremont Street.

GENERAL MAINTENANCE AND REPAIRS.

Tremont Street.

The Metropolitan Water and Sewer Board laid a new sewer to Wakefield through this street, and in performing the work necessarily damaged the street and caused the concrete walk on the west side to settle. Arrangements were made with them to repair the damage done at an estimated cost of \$438.44, which they paid in cash. Rather than repair the street at the old grade, it was deemed advisable to raise and regrade it, which was done, and the money received from the Commonwealth used in part payment of the expense. The road-bed was raised from six inches to two feet with large broken stones, obtained from the sewer trench on the same street and the premises of Frederick P. Bowden, Esq., on Vinton street.

This appropriation of the Highway Division (General Maintenance and Repairs) has been used for a stock account and all tools, supplies, stock and material have been bought and paid for from it. All incidental expense, street signs, cost of running the crusher, steam roller, stable, etc., has been charged and all collections made or materials used credited to this appropriation.

Following is a detail of the work done, together with its cost:

Stone Crusher.

DR.

To amount paid for wood and coal, . . .	\$239 75
" " " " castings and minor parts,	183 60
To amount paid for lumber, . . .	10 29
" " " " powder, . . .	87 77
" " " " oil waste and sundries,	79 12
To amount paid for stone, . . .	14 30
" " " " new steam drill, . . .	175 00
Amount carried forward, . . .	\$789 83

Amount brought forward, . . .	\$789 83	
To amount paid for new steam hose, . . .	18 75	
“ “ “ “ city teams @ \$1.25 per horse,	84 36	
To amount paid for labor and teams per pay rolls,	2,490 16	
		\$3,383 10

CR.

By crushed stone used on streets and by other divisions of the Public Works department (3134 loads), \$2,350 50		
To 154 loads of sand delivered, . . .	77 00	
“ 335 “ “ pavings “ . . .	167 50	
“ 34 “ “ gravel,	33 40	
“ paving blocks and covering stones, . . .	32 40	
		\$2,630 80

Balance charged to general maintenance and repairs,	\$752 30
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To offset the \$752.30, which appears as a deficiency or loss, there is on hand at the crusher yard:

1200 loads blasted out and broken ready for crusher.	
500 “ No. 4 stone ready for street.	
136 “ pea stone “ “ “	
190 “ stone dust “ “ “	

Steam Roller.

DR.

To amount paid for wood and coal, . . .	\$199 22	
“ “ “ “ new front wheels and freight,	238 19	
To amount paid for oil waste and sundries,	35 12	
To amount paid for labor fitting up and repairs,	43 75	
Amount carried forward,		\$516 28

Amount brought forward, \$516 28

CR.

By amount charged for use on streets and by other divisions, 170 $\frac{5}{8}$ days @ \$3.00 per day,	511 88
	\$4 40
Balance charged to general repairs, .	\$4 40

Stable Account.

DR.

To amount paid for rent of stable,	\$207 00	
To amount paid for hay and grain,	1,045 62	
To amount paid for medicine and attendance,	25 94	
To amount paid for shoeing, .	151 58	
“ “ “ “ repairs to carts and harnesses, .	152 10	
To amount paid for labor at and care of stable, . . .	129 87	
	\$1,712 11	
To amount paid for 1 pair horses,	\$425 00	
To amount paid for 1 horse, .	200 00	
“ “ “ “ double cart,	165 00	
To amount paid for 1 double harness,	86 00	
To amount paid for 1 set blankets,	28 33	
	904 33	
		2,616 44

CR.

By amount earned charging \$1.25 per day for actual time each horse was em- ployed,	2,114 41
	\$502 03
Balance charged to general repairs and maintenance,	\$502 03

Incidental Expense and Sundries.

Amount paid for expressage,	\$13 20	
" " " oil and sundries, . .	31 48	
" " " board and black-		
smithing superintendent's horse,	204 74	
Amount paid for use of Marshall's		
horse and buggy,	156 00	
Amount paid for books and station-		
ery,	17 00	
Amount paid for damages caused by		
defects in highways,	38 95	
Amount paid for hardware,	7 74	
" " " car fare, W. F. Hunt,	1 80	
" " " recording deeds, . .	1 80	
" " " grade stakes and		
forms,	12 36	
Amount paid Smith Bros., sharpening		
and repairs,	12 00	
Amount paid for negative, A. E.		
Shepherdson,	6 50	
Amount paid for rubbish barrels and		
straps,	35 80	
Amount paid for freight demurrage,	3 00	
		542 37

Street Signs.

Amount paid L. G. Hoyt for painting		
and lettering,	\$14 25	
Amount paid W. J. McCoubry for		
irons,	2 00	
		16 25

Tool Account.

Amount paid for new tools,	\$106 75	
Amount paid for repairs and sharpen-		
ing,	204 26	
		\$311 01

STOCK ACCOUNT ON HAND FEB. 1, 1902.

Crusher.

1200	loads stone blasted out, broken and ready for crushing.	
500	" No. 4 stone ready for street work.	
136	" pea stone " " " "	
190	" stone dust " " " "	
463	granite paving blocks ready for street work.	

Tremont Street Yard.

20	grates and frames, Concord Foundry.	
7	sets C. B. stone.	
16	C. B. gratings.	
9	C. B. covers.	
21	C. B. traps.	
30	I beams and bolts for same.	
1	set forms for culverts.	
83	granite paving blocks.	
1500	paving brick,	\$1,074 56

Bills Unpaid in Hands of Auditor.

Frost & Hawes, oil and sundries,	\$4 95	
C. B. & F. H. Goss, hay,	31 45	
Steel & Condict, castings,	34 00	
R. E. Gibson, repairs,	3 30	
A. McBeth & Co., blacksmithing.	14 70	
Jos. Edwards, repairing snow plow,	7 50	
W. J. McCoubry, blacksmithing,	5 27	
S. E. Benson & Co., coal and sundries,	23 00	
P. Brown, sand,	23 25	
Mrs. M. J. Ellis, rent of stable,	18 00	
		165 42

General Repairs and Maintenance.

Appropriation,	\$13,900 00
" September 23,	
(Order No. 1372),	5,000 00
Stock balance 1900,	610 23
Amount carried forward,	\$19,510 23

Amount brought forward,				\$19,510 23
Amount transferred from				
tree account,	\$33 86			
Amount transferred from				
account of bridges and				
culverts,	84 16			
	<u> </u>	\$118 02		

Receipts:

Excise tax B. & N. R. R.,		1,657 56		
Cash receipts paid to				
treasurer from other				
divisions for teams and				
stock furnished,		1,023 77		
Water division,	\$44 42			
Sewer " "	19 98			
" private,	5 35			
C. B. & drains,	159 58			
Paving gutters,	109 74			
Bridges and culverts,	51 09			
Surface drainage,	62 27			
Snow removed,	72 51			
Sidewalks,	66 47			
Street sprinkling,	4 38			
	<u> </u>	595 79		
		<u> </u>	3,395 14	

Expended:

Amount from this appropriation:

Bridges and culverts,	\$16 02			
Trimming trees,	11 50			
Catch basins and drains,	881 91			
Paving gutters,	591 10			
Removal of snow,	309 81			
Park street,	1,104 80			
	<u> </u>	\$2,915 14		

Incidental expenses and

sundries,	\$542 37			
Tools and repair of same,	311 01			

Amts. carried forward,	\$853 38	\$2,915 14	\$22,905 37
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Amts. brought forward,	\$853 38	\$2,915 14	\$22,905 37
Street signs,	16 25		
Crusher account, . . .	752 30		
Roller account,	4 40		
Stable account,	502 03		
		2,128 36	
Amount transferred to sur- face drains,		639 19	
Amount transferred by in- voice,		2 04	
		\$5,684 73	

Ashland Street.

Labor as per pay rolls, . .	\$2 00		
City teams @ \$1.25 per horse,	1 25		
Material:—12 loads gravel from Main street, . .			
		3 25	

Beech Avenue, Repairs.

Labor as per pay rolls,	\$14 25		
City teams @ \$1.25 per horse,	3 75		
Material:—23 loads crushed stone,	17 25		
		\$35 25	

Curbing Corners.

Labor as per pay rolls,	\$35 93		
City teams @ \$1.25 per horse,	3 12		
Material:—74.5 feet straight curb, 73 feet 4¾ inch curved stone,	81 16		
		120 21	

Amts. carried forward,	\$155 46	\$5,687 98	\$22,905 37
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Amts. brought forward, \$155 46 \$5,687 98 \$22,905 37

Paving Gutters.

Labor as per pay		
rolls, . . .	\$105 80	
City teams @ \$1.25		
per horse, . . .	15 00	
Material:—60 loads		
pavings, 44		
loads sand, 251		
sq. yds. paved, .	52 00	
	172 80	
		328 26

Berwick Street.

Re-set curb from Grove street to		
Wyoming avenue:		
Labor as per pay rolls, .	\$31 75	
City teams @ \$1.25 per		
horse,	4 38	
Material:—26 ft. straight		
curb, 2-2 inch radius		
corners,	15 86	
		51 99

Boardman Avenue.

Sidewalk.		
Labor as per pay rolls, .	\$61 34	
City teams @ \$1.25 per		
horse,	13 60	
Material:—156 lds. gravel,	15 60	
		90 54

Botolph Street.

Labor as per pay		
rolls,	\$365 01	
City teams @ \$1.25		
per horse,	42 83	
Material and roll-		
ing,	61 30	
	\$469 14	
Amts. carried forward,	\$469 14	\$6,158 77 \$22,905 37

Amts. brought forward, \$469 14 \$6,158 77 \$22,905 37

Corner Curbed

Labor as per pay			
rolls, . . .	\$2 00		
Material:—9.65 ft.			
curbed stone, .	6 27		
		8 27	
			477 41

Cass Street.

Labor as per pay rolls, .	\$208 63	
City teams @ \$1.25 per horse	36 25	
Material and rolling, steam		
roller 4 days, 63 loads		
gravel, 168 lds. crushed		
stone,	138 30	
		383 18

Cedar Park.

Labor as per pay rolls, .	\$111 00	
City teams @ \$1.25 per horse	15 94	
Material and rolling, 4 loads		
crushed stone, 178 loads		
gravel from W. Emerson street,	3 00	
		129 94

Cleaning Streets.

Labor as per pay rolls, .	\$1,807 79	
City teams @ \$1.25 per horse	179 07	
		1,986 86

Circuit Street.

Labor as per pay rolls, .	50	
City teams @ \$1.25 per horse	31	
Material:—1 load crushed		
stone,	75	
		1 56

Amounts carried forward, .			
	\$9,137 72	\$22,905 37	

Amounts brought forward,	\$9,137 72	\$22,905 37
<i>Cutler Street.</i>		
Labor as per pay rolls,	\$388 81	
City teams @ \$1.25 per horse	88 75	
Material:—706 loads gravel,		
1 load crushed stone,		
100 brick, 1 cask cement	74 77	
		552 33
<i>Dell Avenue at Upham Street.</i>		
Relay Crossing.		
Labor as per pay rolls,	\$13 25	
City teams @ \$1.25 per		
horse,	2 50	
Material:—12 lds. crushed		
stone, 3 loads sand,	12 00	
		27 75
<i>Emerson Street, East.</i>		
Labor as per pay rolls,	\$157 12	
City teams @ \$1.25 per horse	25 00	
Material and rolling:—3½		
days steam roller, 58		
loads crushed stone, 180		
loads gravel,	68 00	
		250 12
<i>Emerson Street, West.</i>		
Labor as per pay rolls,	\$234 00	
City teams @ \$1.25 per horse	30 96	
Material and rolling:—7¾		
days steam roller, 51		
loads crushed stone, 242		
loads gravel,	62 30	
		327 26
<i>Fairmount Street.</i>		
Labor as per pay rolls,	24 31	
City teams @ \$1.25 per horse	4 99	
Material,	3 00	
		32 30
Amounts carried forward,	\$10,327 48	\$22,905 37

Amounts brought forward, . \$10,327 48 \$22,905 37

Ferdinand Street.

Labor as per pay rolls, .	\$20 50	
City teams @ \$1.25 per horse	5 00	
Material and rolling:—		
steam roller 1 day, .	3 00	
		28 50
Building wall, C. L. Hoff-		
man,		50 00

First Street.

Labor as per pay rolls, .	20 30	
City teams @ \$1.25 per horse	5 94	
Material:—32 loads gravel,	3 20	
		29 44

Foster Street East.

Labor as per pay		
rolls, . . .	\$308 51	
City teams @ \$1.25		
per horse, . .	34 15	
Material and roll-		
ing, 1¼ days		
rolling, 370		
loads gravel,		
150 feet. 4 inch		
pipe, 1 bend, 1		
tee,	54 55	
		\$397 21

Foster Street, East Main Street to Brook.

Labor as per pay		
rolls,	\$76 25	
City teams @ \$1.25		
per horse, . .	15 63	
Material and roll-		
ing, 3½ days		
steam roller,		
36 lds. gravel,		
76 lds. crushed		
stone,	71 10	
		\$162 98

Amts. carried forward,	\$560 19	\$10,435 42	\$22,905 37
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Amts. brought forward, \$560 19 \$10,435 42 \$22,905 37

*Foster Street Crossing and
Curb at Berwick.*

Labor as per pay		
rolls, . . .	\$26 00	
City teams @ \$1.25		
per horse, . . .	5 94	
Material:—20 feet		
straight curb,		
15 feet 9½ inch		
curved curb,		
63 feet 3½ inch		
flag stone, 300		
block pavings,		
26 lds. crushed		
stone,	————— \$117 58	
		677 77

Frost Avenue.

Labor as per pay		
rolls, . . .	\$12 25	
City teams @ \$1.25		
per horse, . . .	2 50	
Material:—12 lds.		
gravel, . . .	1 20	
	—————	\$15 95

Franklin Street, Repairs.

Labor as per pay		
rolls, . . .	\$137 05	
City teams @ \$1.25		
per horse, . . .	30 99	
Material:— $\frac{1}{8}$ day		
rolling, 42 lds.		
crushed stone,		
64 lds. gravel,	35 75	
	————— \$203 79	
Amts. carried forward,	\$203 79	\$11,129 14 \$22,905 37

Amts. brought forward, \$203 79 \$11,129 14 \$22,905 37

Franklin Street, Curb at

Hose No. 3.

Labor as per pay		
rolls, . . .	\$22 41	
City teams @ \$1.25		
per horse, . .	3 27	
Material:—4 loads		
sand, 622 pav-		
ing blocks,		
(26 $\frac{2}{3}$ yds.) 18		
feet 1 inch		
straight curb,		
9 feet 5 inch		
curved curb, .	47 37	
		73 05

Curb at Main and Franklin Sts.

Labor as per pay		
rolls, . . .	10 31	
Material:—12 feet		
straight curb,		
32 feet 6 $\frac{5}{8}$ inch		
curved curb, .	26 56	
		36 87
		313 71

Green Street.

Labor as per pay rolls, .	\$15 00	
City teams @ \$1.25 per horse	4 37	
Material:—23 loads gravel		
from Linden street, .		
		19 37

Greenwood Street.

Labor as per pay rolls .	\$2 50	
City teams @ \$1.25 per horse	2 19	
Material:—4 loads crushed		
stone,	3 00	
		7 69

Amounts carried forward, . \$11,469 91 \$22,905 37

Amounts brought forward . \$11,469 91 \$22,905 37

Gooch Street.

Labor as per pay rolls, .	\$50 50	
City teams @ \$1.25 per horse	10 00	
Material:—186 loads gravel,	18 60	
		79 10

Grove Street.

Labor as per pay rolls, .	\$234 30	
City teams @ \$1.25 per horse	39 79	
Material and rolling:—11½		
days steam roller, 209		
loads gravel, 178 loads		
crushed stone, . . .	189 90	
		463 99

Hillside Avenue.

Labor as per pay rolls, .	\$2 50	
Material:—1 load crushed		
stone,	75	
		3 25

Hillside Avenue, Curb and Crossing.

Labor as per pay rolls, .	\$31 24	
City teams @ \$1.25 per horse	5 16	
Material:—5 loads sand, 121		
pavers, 24 feet straight		
curb, 500 paving brick,		
20 feet 11¾ inch curved		
curb,	45 95	
		82 35

Howard Street.

Labor as per pay rolls, .	\$103 30	
City teams @ \$1.25 per horse	13 75	
Material:—34 loads gravel,		
64 loads crushed stone,	48 00	
		165 05

Amounts carried forward,	. \$12,263 65	\$22,905 37
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Amounts brought forward, . \$12,263 65 \$22,905 37

Larrabee Street.

Labor as per pay rolls, .	88	
City teams @ \$1.25 per horse	68	
Material:—1 load crushed stone, 1 load gravel, .	85	
		2 41

Laurel Street.

Labor as per pay rolls, .	\$15 75	
City teams @ \$1.25 per horse	1 88	
Material and rolling, 1½ days steam roller, 5 lds. gravel, 30 loads crushed stone,	27 50	
		45 13

Lake Avenue.

Labor as per pay rolls, .	\$231 75	
City teams @ \$1.25 per horse	29 38	
Material and rolling, 11 days steam roller, 370 loads crushed stone,	310 50	
		571 63

Lebanon Street.

Labor as per pay rolls, .	\$13 75	
City teams @ \$1.25 per horse	3 75	
Material and rolling, 1½ days steam roller, 21 loads crushed stone, .	20 25	
		37 75

Leeds Street.

Labor as per pay rolls, .	\$16 00	
City teams @ \$1.25 per horse	12 50	
Material:—48 loads gravel, .	4 80	
		33 30

Amounts carried forward, . \$12,953 87 \$22,905 37

Amounts brought forward,	\$12,953 87	\$22,905 37
<i>Linden Street, Repairs.</i>		
Labor as per pay rolls,	\$59 80	
Material and rolling,	3 00	
	—	62 80
<i>Curbing Corners at Green.</i>		
Labor as per pay rolls,	\$9 13	
Material:—1 day steam roller, 24 feet straight curb, 20 feet 4½ inch curved curb,	37 02	
	—	46 15
<i>Linwood Avenue.</i>		
Labor as per pay rolls,	\$59 50	
City teams @ \$1.25 per horse	4 39	
Material and rolling, ½ day steam roller, 21 loads crushed stone,	17 25	
	—	81 14
<i>Lynde Street</i>		
Labor as per pay rolls,	\$150 08	
City teams @ \$1.25 per horse	26 35	
Material and rolling, 4½ days steam roller, 190 loads gravel, 194 crushed stone,	\$177 00	
	—	353 43
<i>Main Street Repairs.</i>		
Labor as per pay rolls,	\$111 84	
City teams @ \$1.25 per horse	41 40	
Material and rolling, ¼ day steam roller, 3 loads sand, 3 loads pavings, 23 loads gravel, 173 loads crushed stone,	135 80	
	—	289 04
Amounts carried forward,	\$13,786 43	\$22,905 37

Amts. brought forward, . \$13,786 43 \$22,905 37

Melrose Street.

Labor as per pay rolls, .	68 00	
City teams @ \$1.25 per horse	16 88	
Material and rolling 1 day		
steam roller, 143 loads		
gravel from Linden		
street, 6 loads crushed		
stone,	9 00	
		93 88

Myrtle Street.

Labor as per pay rolls, .	\$66 75	
City teams @ \$1.25 per horse	19 36	
Material:—2 days steam		
roller, 20 loads gravel,		
92 loads crushed stone,	77 00	
		163 11

Linden Street, West.

Labor as per pay rolls, .	\$58 00	
City teams @ \$1.25 per horse	10 00	
Material and rolling, . . .	3 00	
		71 00

Linden Street Curb Steps.

Labor as per pay rolls, .	\$8 22	
City teams @ \$1.25 per horse	63	
Material,	13 12	
		21 97

Linden Street, Grading Lawn, C. L.

Hoffman.

Steam roller 1 day, 29 feet		
2 inch curb, material		
from the street, . . .		24 86

Oakland Street.

City teams @ \$1.25 per horse	\$6 25	
Labor as per pay rolls, .	50 25	
103 loads gravel from West		
Emerson street.		56 50

Amounts carried forward, . \$14,217 75 \$22,905 37

Amounts brought forward, . \$14,217 75 \$22,905 37

Orient Avenue.

Labor as per pay rolls, .	\$7 94	
City teams @ \$1.25 per horse	2 50	
Material:—16 loads crushed		
stone,	12 00	
		22 44

Perkins Street.

Labor as per pay rolls, .	\$14 00	
City teams @ \$1.25 per horse	1 87	
Material:—8 loads crushed		
stone,	6 00	
		21 87

Pine Street.

Labor as per pay rolls, .	\$11 25	
City teams @ \$1.25 per horse	1 25	
Material:—24 loads gravel		
from W. Emerson street		
		12 50

Poplar Street.

Labor as per pay rolls, .	\$10 25	
City teams @ \$1.25 per horse	1 25	
Material:—20 loads gravel		
from W. Emerson		
street.		
		11 50

Porter Street.

Labor as per pay rolls, .	\$276 38	
City teams @ \$1.25 per horse	45 32	
Material and rolling, 4½		
days steam roller, 159		
loads gravel, 118 loads		
crushed stone,	117 90	
		439 60

Amounts carried forward, . \$14,725 66 \$22,905 37

Amounts brought forward, . \$14,725 66 \$22,905 37 .

Pleasant Street.

Labor as per pay rolls, .	\$171 00	
City teams @ \$1.25 per horse	201 00	
Material and rolling, 4½		
days steam roller, 195		
loads gravel, 184 loads		
crushed stone, . . .	46 71	
		418 71

Sewall's Woods Road.

Labor as per pay rolls, .		7 50
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Sixth Street.

Labor as per pay rolls, .	\$24 65	
City teams @ \$1.25 per horse	1 88	
Material:—8 loads gravel,	80	
		27 33

Swain's Pond Avenue.

Labor as per pay rolls, .	\$393 00	
City teams @ \$1.25 per horse	34 07	
Material and rolling, steam		
roller 10 days, 253 loads		
gravel, balance used		
from street, . . .	65 56	
		492 63

Sylvan Street.

Labor as per pay rolls, .	\$44 75	
City teams @ \$1.25 per horse	9 28	
Material and rolling, 10		
days steam roller, 29		
loads crushed stone, .	27 75	
		81 78

Tremont Street.

Labor as per pay rolls, .	\$538 35	
City teams @ \$1.25 per horse	44 06	
Material and rolling, 10		
days steam roller, 517		
loads crushed stone, 274		
loads rock, . . .	425 85	
		1,008 16

Trenton Street.

Labor as per pay rolls, .	\$4 00	
City teams @ \$1.25 per horse	4 38	

Amts. carried forward,	\$8 38	\$16,761 77	\$22,905 37
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Amts. brought forward, \$8 38 \$16,761 77 \$22,905 37

Material:—10 loads crushed

stone, 7 50

15 88

Upham Street, Repairs.

Labor as per pay rolls, . \$261 55

City teams @ \$1.25 per horse 56 88

Material and rolling, . . 131.47

449 90

*Curbed Corner and Grading Sidewalk
Corner Dell Avenue.*

Labor as per pay rolls, . \$34 38

City teams @ \$1.25 per horse 3 13

Material:—7 days steam roller, 120 loads gravel, 137 loads crushed stone, 21.08 feet straight curb, 12 feet 11 ½ inch curved curb,

21 09

58 60

Vinton Street.

Labor as per pay rolls, . \$77 00

City teams @ \$1.25 per horse 6 25

Material and rolling:—½ day steam roller, 124 loads gravel, 104 from West Emerson street, .

3 50

86 75

Washington Street, Pleasant Street, South.

Labor as per pay rolls, . . \$196 63

City teams @ \$1.25 per horse, . 41 25

Material and rolling:—6 days steam roller, 138 lds. gravel, 185 loads crushed stone, .

170 05

\$407 93

Amts. carried forward, \$407 93 \$17,372 90 \$22,905 37

Amts. brought forward, \$407 93 \$17,372 90 \$22,905 37
Washington Street, Trenton
Street, South.

Labor as per pay			
rolls, . . .	\$742 75		
City teams @ \$1.25			
per horse, . .	47 50		
Steam drill and			
roller 21 days,	63 00		
		853 25	
			1,261 18

Walton Park.

Labor as per pay rolls, . .	\$1 50		
City teams @ \$1.25 per horse	31		
			1 81

Whittier Street.

Labor as per pay rolls, . .	\$61 25		
Material (powder), . . .	92		
			62 17

West Hill Avenue.

Labor as per pay			
rolls, . . .	\$203 95		
City teams @ \$1.25			
per horse, . . .	16 87		
Material and roll-			
ing, . . .	30 70		
		251 52	

Corner Curb at Botolph Street.

Labor as per pay			
rolls, . . .	\$10 44		
Material:—3 days			
steam roller, 1			
load crushed			
stone, 172 lds.			
gravel, 14.65			
straight curb,			
9 feet 6½ inch			
curved curb, . .	15 80		
		26 24	
			277 76

Amounts carried forward, . . . \$18,975 82 \$22,905 37

Amounts brought forward, . . \$18,975 82 \$22,905 37

Woodland Avenue.

Labor as per pay rolls, . . .	\$42 25	
City teams @ \$1.25 per horse	7 50	
Material:—30 loads gravel,	3 00	
		52 75

Wyoming Avenue.

Labor as per pay rolls, . . .	\$20 00	
City teams @ \$1.25 per horse	4 94	
Material,	17 30	
		42 24

York Terrace.

Labor as per pay rolls, . . .	\$225 76	
City teams @ \$1.25 per horse	33 39	
Material and rolling, $\frac{5}{8}$ day steam roller, 198 loads gravel and material from Ferdinand street,	21 68	
		280 83

Youle Street.

Labor as per pay rolls, . . .	\$11 25	
City teams @ \$1.25 per horse	1 25	
		12 50

General Maintenance and minor repairs, including charges to Malden Gas Light Co., for care of trenches, also to the Boston & Northern R. R. for catch basins in the tracks, which have been paid for and included in cash receipts paid to the treasurer.

Green and Linden Street, Corner.

Labor as per pay rolls,	\$12 06	
City teams @ \$1.25 per horse,	1 09	
Material,	37 06	
		50 21

Amts. carried forward,	\$50 21	\$19,364 14	\$22,905 37
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Amts. brought forward,	\$50 21	\$19,364 14	\$22,905 37
Boundary Stone between Melrose and Stoneham.			
Labor as per pay rolls, . . .	6 16		
City teams @ \$1.25 per horse, . .	78		
Material, . . .	10 00		
		16 94	

Maintenance.

James Marshall, (1 year),	\$1,000 00		
W. H. Martin, (26 weeks), . .	455 00		
		1,455 00	

Minor Repairs and Charges.

Labor as per pay rolls, . . .	\$580 35		
City teams @ \$1.25 per horse, . .	110 17		
Material : — 20½ days steam roller, 11 loads sand, 17 loads gravel, 182 lds. C. stone, 3,700 brick, 5 M. H. frames, 6 grat- ings, 6 casks Portland ce- ment, 3 casks Rosendale ce- ment, 7 M. H. rods, 24 feet straight curb, 40.4 ft. curved curb, . . .	416 87		
		1,107 39	
			2,629 54
Amounts carried forward,	. .	\$21,993 68	\$22,905 37

Amounts brought forward,	\$21,993 68	\$22,905 37
Stock Balance.		
Crusher, per stock account,	\$752 30	
At yard, per stock account,	322 26	
		1,074 56
Cash balance per treasurer's ac't		2 55
Bills in hands of the auditor unpaid, charged in above accounts,		165 42
	\$23,070 79	\$23,070 79

SURFACE DRAINAGE.

November 19, 1901, a report on a System of Surface Drains, together with its estimated cost, was submitted to the Board of Aldermen. The total amount of this estimate, exclusive of any improvements in the main brook from Ell Pond to the Malden line, was \$334,610.00. This report was accepted, the System as outlined adopted, and on July 9, 1901, the Board of Aldermen passed Order No. 1279, appropriating \$10,000.00 to be expended in constructing a portion of said System.

Demands for drainage in the various sections of the city were numerous, the amount of the appropriation small. Investigations and estimates were made with a view of giving relief to as many as possible. After thoroughly considering the various needs and requests, it was decided to give partial relief to many rather than entire relief to a few; consequently the money was expended in making partial improvements in various sections of the city, but all work done is of a permanent nature, and a part of the System as outlined in said report. Following is a brief description of the work done in the different sections of the city.



Botolph St. & West Hill Avenue Drain

Drains constructed shown thus 
 Proposed future extensions " " 

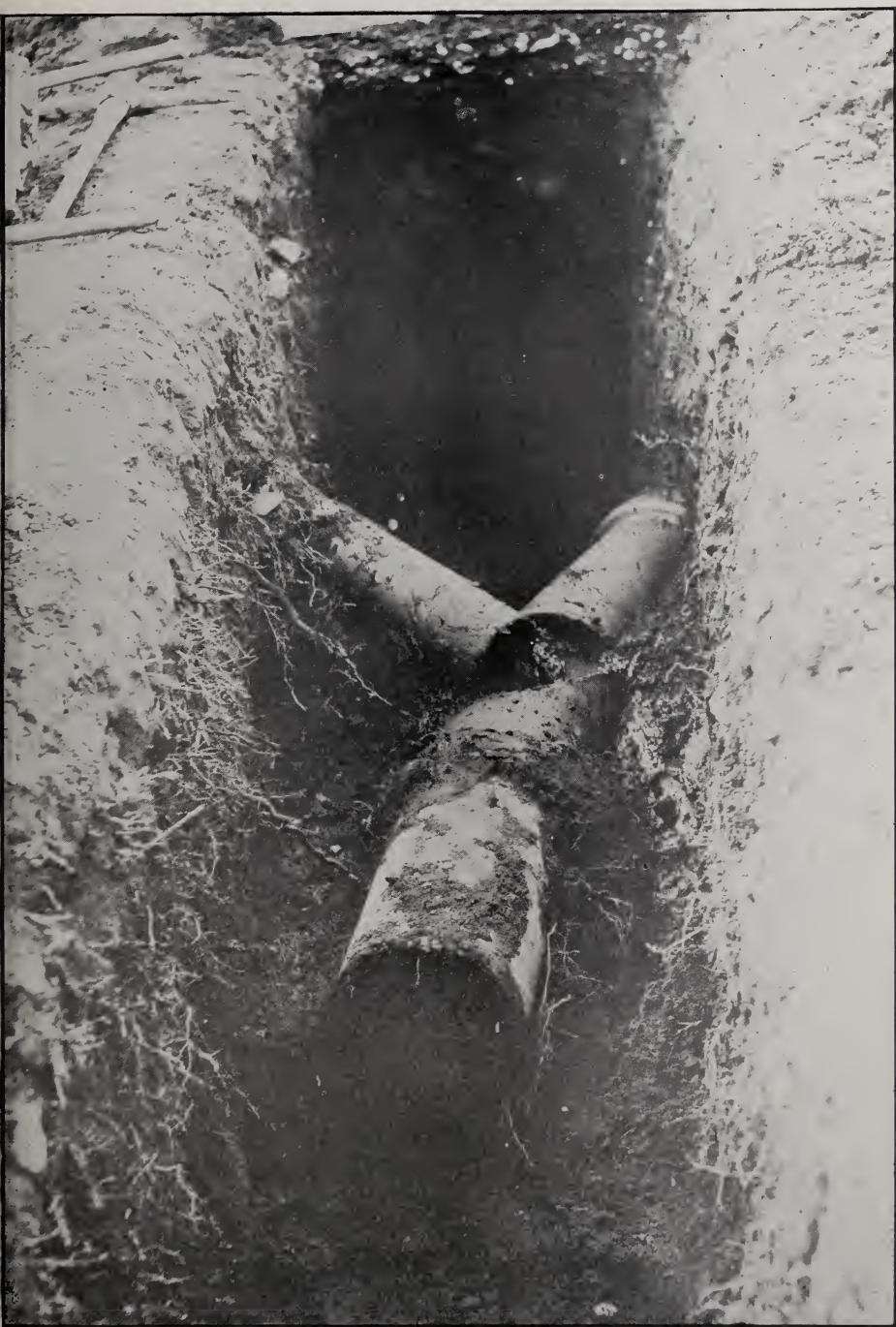


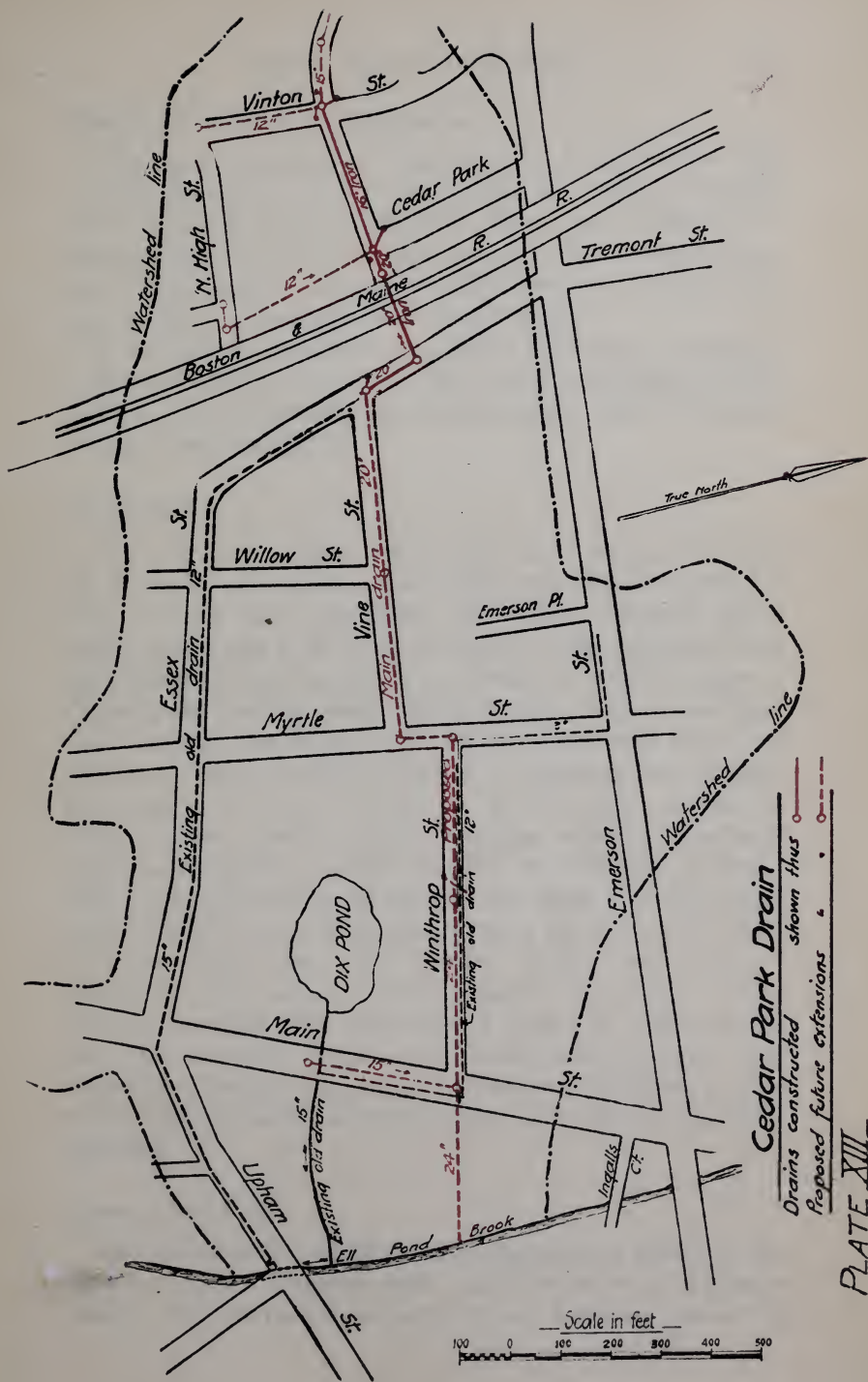
PLATE X. Cedar Park drain. Showing faulty connection in old pipe.



PLATE XI. Cedar Park drain. Showing faulty connection in old pipe.



PLATE XII. Cedar Park drain. Showing condition of old pipes taken out.



Cedar Park Drain

Drains constructed shown thus

Proposed future extensions

Botolph Street and West Hill Avenue.

This work consisted in extending the 15 inch drain, laid by the Board of Sewer Commissioners (from Franklin street through land of Shepard, Maine and Crawford to Botolph street) west in Botolph street, to West Hill avenue, and a 12 inch pipe laid up West Hill avenue to Chaska avenue, building 3 manholes and 5 catch-basins.

In this work provisions were made for future extensions in Botolph street to York terrace, and if necessary up York terrace. Its estimated cost was \$1,261.92, while its actual cost was only \$1,154.13.

Cedar Park.

The old drain leading from Cedar park across the B. & M. R. R. to the Essex street drain was abandoned and a new 20 inch pipe laid from Vine street, through Essex street, across the B. & M. R. R. tracks to the angle in Cedar park, where it was intended to connect it with the pipe in Cedar park leading from Vinton street. Upon investigation this pipe was found to be entirely filled with roots and deposit; it was therefore decided to abandon this 10 inch pipe and to relay in its place an 18 inch pipe. Owing to the fact that in order to give the pipe across the railroad tracks a temporary outlet into the 10 inch pipe in Essex street, its grade had to be raised 2 feet from what was originally planned; this, of course, brought the end at the angle in Cedar park also 2 feet higher, and, in fact, within 8 inches of the surface of the ground. To have laid an 18 inch earthen pipe with only 8 inches of cover would have been unsafe, therefore a 16 inch cast iron pipe was substituted and the rate of grade increased sufficient to give it the same capacity as the 18 inch on the grade originally planned.

Laurel Street Drain.

The construction of this drain started at a point in the land of Mabel Damon about 100 feet west of Lebanon street, and continued to and across Lebanon street, 30

inches in diameter, built of brick; at this point the brook which flowed between Foster and Laurel streets was taken in, an 18 inch inlet left for future extension to and up Foster street, and a 24 inch drain continued south in Lebanon street, to Laurel street; a 12 inch pipe laid from Laurel street to Grove street and a 20 inch pipe up Laurel street to Gooch street, and through Gooch street to Grove street.

The estimated cost of constructing all of the drains within this area is \$15,751.00, the cost of the drains built is \$3,495.11, from which it will be seen that \$12,255.89 is required to complete the drain within this section. So much of these drains, as are for the relief of the upper end of Grove street, should be constructed the coming season, the estimated cost of which is about \$2,000.00.

Dell Avenue Brook or "Leonard's Drain."

The drainage improvements made in the vicinity of Lebanon, Laurel, Gooch and Grove streets would naturally tend to increase the rapidity of the flow in the stream or brook into which they discharged. Anticipating this, Mr. Henry A. Leonard, through whose land this brook flowed, wrote me the following letter:

MELROSE, Oct. 29, 1901.

W. DABNEY HUNTER, Esq.:

DEAR SIR: After repeated efforts on our part to have you, or the city which you represent, do something about the drain and surface water, which empties into and over our land, we have come to this decision, (after taking legal advice) that if some satisfactory arrangement in the matter is not made with us within ten days from this date, we shall proceed at once to stop up said drain, that we may be able to build our street and not be obliged to submit to this nuisance any longer.

(Signed) HENRY A. LEONARD.
CAROLINE J. LEONARD

Being unable to comply with Mr. Leonard's request, he caused a dam to be placed across this brook at the west end of the culvert under Dell avenue. I was immediately assailed with requests to have the same removed. Having submitted the matter to the city solicitor and receiving from him the advice to take no action in the matter until

such time as the damming of the water should in my judgment endanger travel upon the public highway, there was nothing to be done but to wait for either one of two things to take place, viz : for the board of aldermen to take certain rights in the land of Leonard, or until the rise of the water should endanger the public travel; the latter took place first.

On December 15, 1901, the water rose to such height as to cause the street to cave in and become dangerous to travel. Instructions were immediately given to remove this dam with as much care as possible, and to place all material taken therefrom, carefully upon Mr. Leonard's land, which was done about noon of the same day.

On December 26, 1901, the board of aldermen passed Order No. 1435, which reads as follows :

Be it ordered : That acting under the provisions of law applicable thereto, a main drain either open or covered, shall be laid or constructed in the following described right of way as hereinafter set forth, viz :

Beginning at a point on the westerly side of Lebanon street eighty-seven and fourteen and one half one hundredths ($87.14\frac{1}{2}$) feet northerly from a stone bound on said westerly line of Lebanon street nearly opposite the center of Laurel street; thence running south $65^{\circ} 38' 13''$ west, one hundred ninety-eight and twenty-five one hundredths (198.25) feet to an angle; thence south, $88^{\circ} 36' 08''$ west three hundred eighty-three and thirty-one one hundredths (383.31) feet to a point in Dell avenue; thence north $86^{\circ} 23' 52''$ west one hundred eighty-nine and seventy-two one hundredths (189.72) feet to an angle; thence south $82^{\circ} 58' 58''$ west five hundred forty-two and forty-two one hundredths (542.42) feet to an angle; thence north, $69^{\circ} 25' 22''$ west seventy-eight (78) feet more or less to the easterly side of Ell Pond brook as laid out by the county commissioners. The above description is intended to conform to plans drawn by W. Dabney Hunter, engineer and superintendent of public works, hereto annexed and made a part of this order; that the treasurer be and hereby is authorized to pay the expense therefor in an amount not exceeding \$750.00 and that the city treasurer be and hereby is given authority to issue note or notes of the City of Melrose not exceeding in the aggregate the sum of \$750.00 payable in one year from the date thereof at a rate of interest not exceeding 4 per cent. per annum. It is hereby adjudged that the said drain is a necessity for the public convenience and health; that the City of Melrose acting under the authority of the Public Statutes, and also under all other provisions of law and every

other power it hereto enabling, has taken and hereby does take for the purposes of constructing and maintaining a main drain in the private lands as hereinbefore specified for the sole use and benefit of the said City of Melrose the following lots and parcels of land situated in said Melrose, in said County of Middlesex, viz: A certain lot situated on the westerly side of Lebanon street, supposed to be owned by Mabel M. Damon, bounded and described as follows:—Beginning at a point on the westerly line of Lebanon street ninety-four and sixty-four and one half one hundredths ($94.64\frac{1}{2}$) feet northerly from a stone bound on said westerly line of Lebanon street nearly opposite Laurel street; thence south $65^{\circ} 38' 13''$ west one hundred forty-nine and forty-seven one hundredths (149.47) feet to land of Chas. L. Smith; thence along land of said Smith south $7^{\circ} 29' 47''$ east fifteen and sixty eight one hundredths (15.68) feet; thence north $65^{\circ} 38' 13''$ east eighty-two and two one hundredths (82.02) feet; thence north $24^{\circ} 21' 47''$ west two (2) feet; thence north $65^{\circ} 38' 13''$ east seventy-two (72) feet to Lebanon street; thence along said westerly line of Lebanon street north $24^{\circ} 22' 42''$ west thirteen (13) feet to point of beginning, containing nine hundred ninety four and five one hundredths (994.05) square feet.

A certain other lot of land situated on Cass street, supposed to be owned by Chas. L. Smith, bounded and described as follows:—Beginning at a point on the easterly line of said Cass street two hundred sixty-one and seventy-five one hundredths (261.75) feet southerly from the southerly side of Foster street, measuring along the said easterly line of Cass street; thence north $83^{\circ} 36' 08''$ east sixty-five (65) feet; thence north $65^{\circ} 38' 13''$ east forty-seven and six tenths (47.6) feet to land of Mabel M. Damon; thence along land of said Mabel M. Damon south $7^{\circ} 29' 47''$ east fifteen and sixty-eight one hundredths (15.68) feet; thence south $65^{\circ} 38' 13''$ west twenty-one and forty and one-half one hundredths (21.405) feet to land of Josiah J. Garrett; thence along land of said Garrett south $82^{\circ} 46' 13''$ west ninety and forty-two one hundredths (90.42) feet to the said easterly line of Cass street; thence along said easterly line of Cass street north $5^{\circ} 37' 02''$ west eight and eighty-two one hundredths (8.82) feet to point of beginning, containing eleven hundred sixty-six and eighteen one hundredths (1166.18) square feet.

A certain other lot situated on the easterly side of Cass street, supposed to be owned by Josiah J. Garrett, bounded and described as follows: Beginning at a point on the easterly line of Cass street two hundred seventy and fifty-seven one hundredths (270.57) feet southerly from the southerly line of Foster street, measuring along the said easterly line of Cass street; thence north $82^{\circ} 46' 13''$ east ninety and forty-two one hundredths (90.42) feet; thence south $65^{\circ} 38' 13''$ west twenty-four and one and one-half hundredths (24.015) feet; thence south $83^{\circ} 36' 08''$ west sixty-seven and fifty-six one hundredths

(67.56) feet to the said easterly line of Cass street; thence north $5^{\circ} 37' 02''$ west six and eighteen one hundredths (6.18) feet to the point of beginning, containing five hundred twenty-five and sixty-seven one hundredths (525.67) square feet.

A certain other lot of land situated on the westerly side of Cass street, supposed to be owned by Mrs. Bertha Tilton, bounded and described as follows:—Beginning at a point on the said westerly line of Cass street two hundred sixty and nine one hundredths (260.09) feet southerly from the southerly side of Foster street, measuring along said westerly line of Cass street; thence south $83^{\circ} 36' 08''$ west eighty and seventeen one hundredths (80.17) feet to land of Eliza A. Farnsworth; thence along land of said Farnsworth south $6^{\circ} 09' 22''$ east eight and seventy-four one hundredths (8.74) feet to land of Mary J. Doherty; thence north $83^{\circ} 36' 58''$ east along land of said Doherty twelve and ninety-three one hundredths (12.93) feet, and along land of John J. Keating sixty-seven and fifteen one hundredths (67.15) feet to the westerly line of said Cass street; thence along said westerly line of Cass street north $5^{\circ} 37' 02''$ west nine and seventeen one hundredths (9.17) feet to the point of beginning, containing seven hundred seventeen and fourteen one hundredths (717.14) square feet.

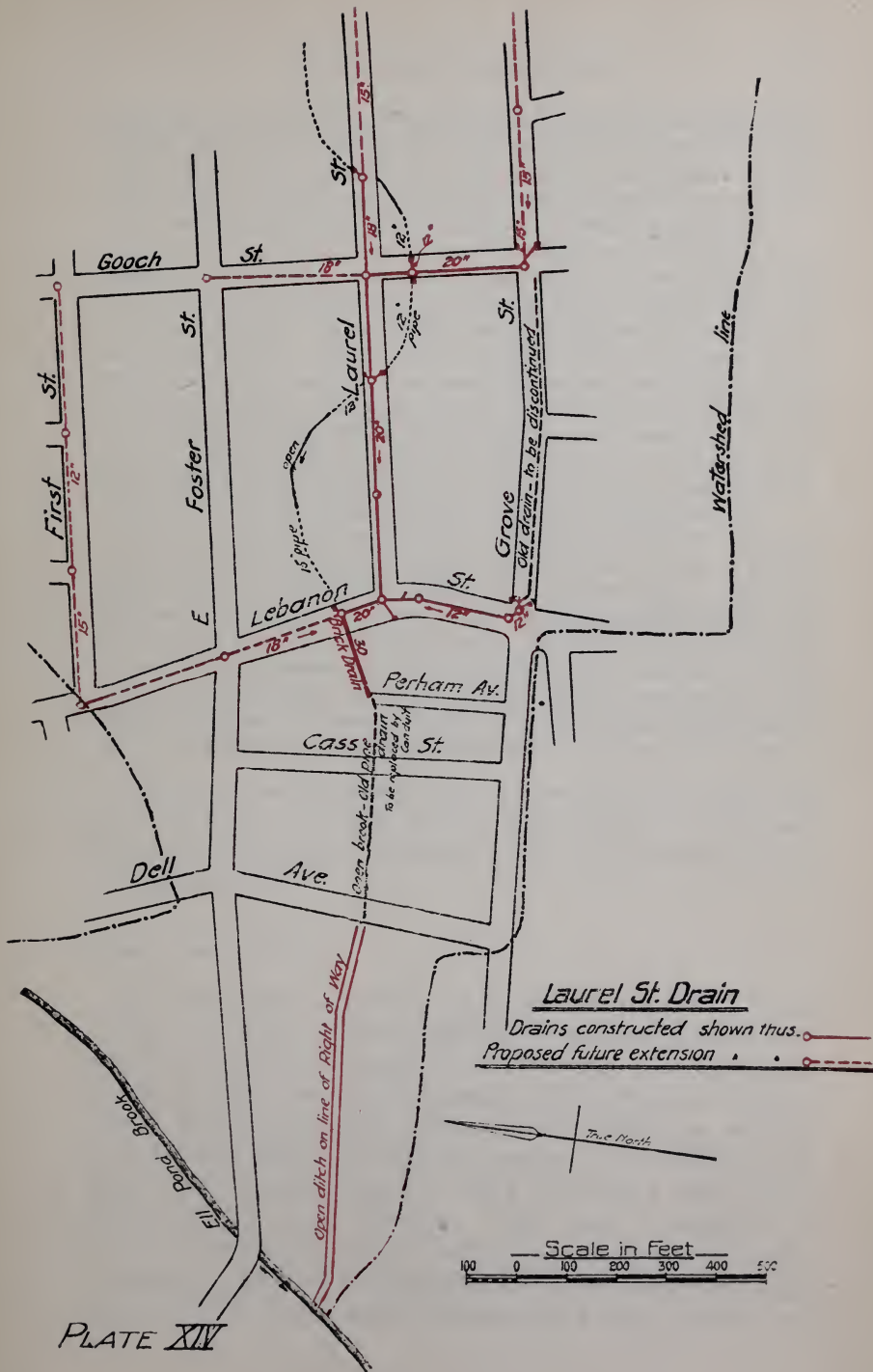
A certain other lot of land situated on the west side of Cass street, supposed to be owned by John J. Keating, bounded and described as follows:—Beginning at a point on the said westerly line of Cass street two hundred sixty-nine and twenty-six one hundredths (269.26) feet southerly from the southerly side of Foster street running along the said westerly line of Cass street; thence south $83^{\circ} 36' 58''$ west sixty-seven and fifteen one hundredths (67.15) feet to land of Mary J. Doherty; thence along land of said Doherty south $5^{\circ} 30' 52''$ east six and nineteen one hundredths (6.19) feet; thence north $83^{\circ} 36' 08''$ east sixty-seven and seventeen one hundredths (67.17) feet to the said westerly line of Cass street; thence along said westerly line of Cass street north $5^{\circ} 37' 02''$ west five and eighty-three one hundredths (5.83) feet to the point of beginning, containing four hundred three and sixty-five one hundredths (403.65) square feet.

A certain lot of land situated on the northerly side of Grove street, supposed to be owned by Mary J. Doherty, bounded and described as follows:—Beginning at the northeast corner of the premises at land of Mrs. Bertha Tilton and John J. Keating; thence along land of Mrs. Bertha Tilton and Eliza A. Farnsworth south $83^{\circ} 36' 58''$ west sixty-six (66) feet to land of Mrs. Mary Henny; thence south $5^{\circ} 30' 52''$ east six and fifty-three one hundredths (6.53) feet; thence north $83^{\circ} 36' 08''$ east sixty-six and one one hundredth (66.01) feet to land of John J. Keating; thence north $5^{\circ} 30' 52''$ west six and nineteen one hundredths (6.19) feet to the point of beginning, and containing four hundred nineteen and seventy-nine one hundredths (419.79) square feet.

A certain other lot situated on the easterly side of Dell avenue, supposed to be owned by Eliza A. Farnsworth, bounded and described as follows:—Beginning at a point on the said easterly side of Dell avenue one hundred thirty-four and fifty-four one hundredths (134.54) feet southerly from an angle in said easterly line of Dell avenue; thence north $83^{\circ} 36' 08''$ east one hundred seventy-eight and seventy-four one hundredths (178.74) feet to land of Mrs. Bertha Tilton; thence along land of said Tilton south $6^{\circ} 09' 22''$ east eight and seventy-four one hundredths (8.74) feet to land of Mary J. Doherty; thence along land of said Doherty south $83^{\circ} 36' 58''$ west fifty-three and seven one hundredths (53.07) feet; thence along land of Mrs. Mary Henny south $84^{\circ} 02' 26''$ west one hundred twenty-six and eighty-one one hundredths (126.81) feet to the said easterly line of Dell avenue; thence along said easterly line of Dell avenue north $2^{\circ} 29' 28''$ east seven and fifty-nine one hundredths (7.59) feet to the point of beginning, containing fourteen hundred fifty-six and thirty-four one hundredths (1456.34) square feet.

A certain other lot of land situated on the easterly side of Dell avenue, supposed to be owned by Mrs. Mary Henny, bounded and described as follows:—Beginning at a point on the said easterly line of Dell avenue one hundred forty-nine and seventy-two one hundredths (149.72) feet southerly from an angle in said easterly line of Dell avenue; thence north $83^{\circ} 36' 08''$ east one hundred twenty-seven and eighty-seven one hundredths (127.87) feet to land of Mary J. Doherty; thence along land of said Doherty north $5^{\circ} 30' 52''$ west six and fifty-three one hundredths (6.53) feet to land of Eliza A. Farnsworth; thence along land of said Farnsworth south $84^{\circ} 02' 26''$ west one hundred twenty-six and eighty-one one hundredths (126.81) feet to said easterly line of Dell avenue; thence along said easterly line of Dell avenue south $2^{\circ} 29' 28''$ west seven and fifty-nine one hundredths (7.59) feet to the point of beginning, and containing eight hundred ninety-three and sixty-five one hundredths (893.65) square feet.

A certain other lot of land situated on the westerly side of Dell avenue, supposed to be owned by Henry A. and Caroline J. Leonard, bounded and described as follows:—Beginning at a point on the westerly side of said Dell avenue one hundred forty and thirty one hundredths (140.30) feet southerly from an angle in said westerly line of Dell avenue; thence north $86^{\circ} 23' 52''$ west one hundred seventy-six and ninety-eight one hundredths (176.98) feet; thence south $82^{\circ} 58' 58''$ west five hundred forty-one and twenty-eight one hundredths (541.28) feet; thence north $69^{\circ} 25' 22''$ west fifty-two and eighty-five one hundredths (52.85) feet to land of Justus Geist; thence along land of said Geist south $00^{\circ} 49' 38''$ west fifteen and ninety-four one hundredths (15.94) feet; thence south $69^{\circ} 25' 22''$ east fifty-one and fifteen one hundredths (51.15) feet; thence north $82^{\circ} 58' 58''$ east five hundred forty-three and fifty-six one hundredths (543.56) feet; thence south



86° 23' 52" east one hundred seventy-five and eighty-six one hundredths (175.86) feet to the said westerly side of Dell avenue; thence along said westerly side of Dell avenue north 2° 29' 28" east fifteen (15) feet to the point of beginning, containing eleven thousand five hundred sixty-two and sixty-seven one hundredths (11,562.67) square feet.

A certain other lot of land situated on Grove street, supposed to be owned by Justus Geist, bounded and described as follows:—Beginning at a point on the dividing line of land of said Geist and Henry A. and Caroline J. Leonard; thence along said dividing line north 00° 49' 38" east fifteen and ninety-four one hundredths (15.94) feet; thence north 69° 25' 22" west twenty-one and twenty-three one hundredths (21.23) feet more or less to Ell Pond brook; thence along Ell Pond brook south 36° 04' 38" west fifteen and fifty-seven one hundredths (15.57) feet more or less; thence south 69° 25' 22" east thirty and seventy-seven one hundredths (30.77) feet more or less to the point of beginning, and containing three hundred and ninety (390) square feet.

All the foregoing descriptions are intended to conform to plans drawn by W. Dabney Hunter, Engineer and Superintendent of Public Works, hereto attached and made a part of this order; reserving, however, to the owner or owners of the different parcels of which said land forms a part, their heirs and assigns, the right to pass and repass on foot and with teams over the above described lands, and all other rights not inconsistent with the laying, making, maintaining and repair of any main or mains or pipes or other necessary appliance of said City of Melrose now or hereafter laid in said lands hereby taken.

Acting on the foregoing order a new ditch was dug from the end of the pipe just east of Dell avenue to Ell Pond brook, which has proved sufficient to care for the drainage of this territory.

Linden Street Drain.

The old culvert across Green street just north of Linden street was taken up and replaced by a 30 inch brick and concrete conduit and extended west through private land of Dr. J. S. Clark, and south through Green street to Linden street, and east through Linden street to Bellevue avenue. The brook running through the land of C. O. Stickney was taken into this drain and to catch the sand a large sump constructed at their junction. This drain is designed to care for the surface water which at present flows in the stream running from First street across Upham street through land of N. P. Jones, across Porter and Linden streets and

just east of Batchelder street, again crossing Linden street to Green street, thence across Main street to Sucker Brook. The total area of this shed is 118 acres; the area tributary at Green street is 87 acres, which by the formula used yields 30 cubic feet per second. The capacity of the drain as constructed is 38.5 cubic feet per second.

The estimated cost of the drain was \$4.24 per linear foot; its actual cost was \$4.44 per linear foot, the increase is due to two reasons, first, during the progress of the work we were unfortunate in having a very severe rain storm, second, the gravel excavated in this street was of excellent quality and was used on the highways, the laborers employed on the drain being used to fill carts, and no credit given for either gravel or labor.

Russell and Adams Streets.

The junction of Russell and Adams streets is the lowest place in Russell street, and a portion of Adams street also drains to this point. A number of years ago the Board of Selectmen obtained of James Axford a written permission to lay a drain across his lot to the brook just north of Washington street and south of Russell street. This pipe was laid and 2 catch-basins built at the junction of Adams and Russell streets, which I understand worked satisfactorily for several years. In 1900 complaint was received that this drain was stopped up and that at every rain or heavy shower these two streets at their junction were flooded, the water at times being 18 inches to 2 feet deep. Workmen were sent to clear the obstruction in the drain but were warned by Mr. Axford not to trespass upon this land and he also served formal notice at the office to that effect. The matter was submitted to the City Solicitor, Mr. Washburn, who gave as his opinion that the permission given by Mr. Axford did not give to the city the right to enter upon his premises at this time; therefore nothing could be done with the old drain, and owing to the lack of funds the new drain could not be built through the street to Spot Pond brook, consequently the abutters and residents had to suffer.

When the appropriation for drains was passed, this was

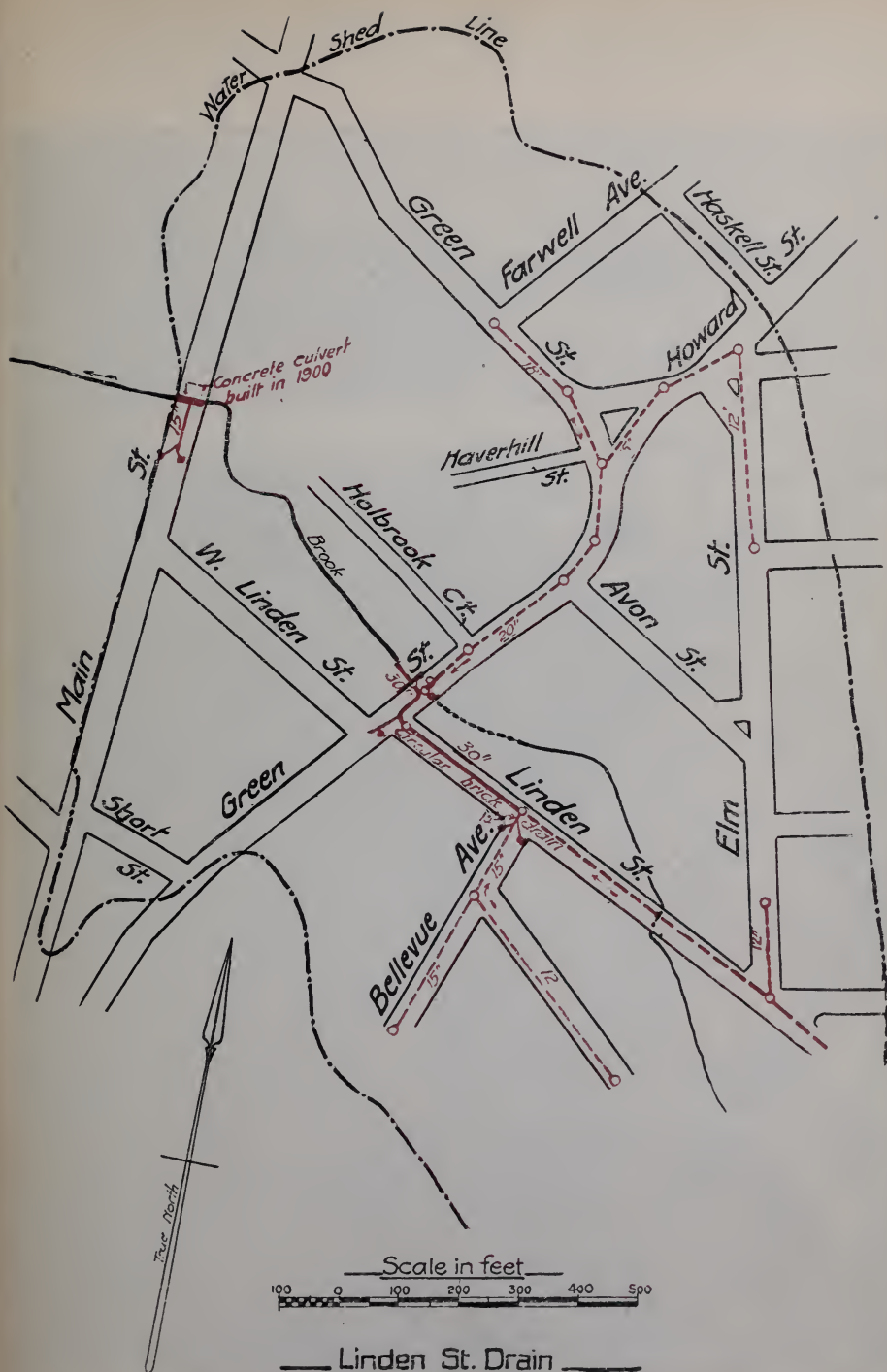




PLATE XVI. 30 inch brick drain in Green Street on curve, radius 15 feet.



PLATE XVII. Linden Street drain, 30 inch brick. Showing brick lining to concrete invert.

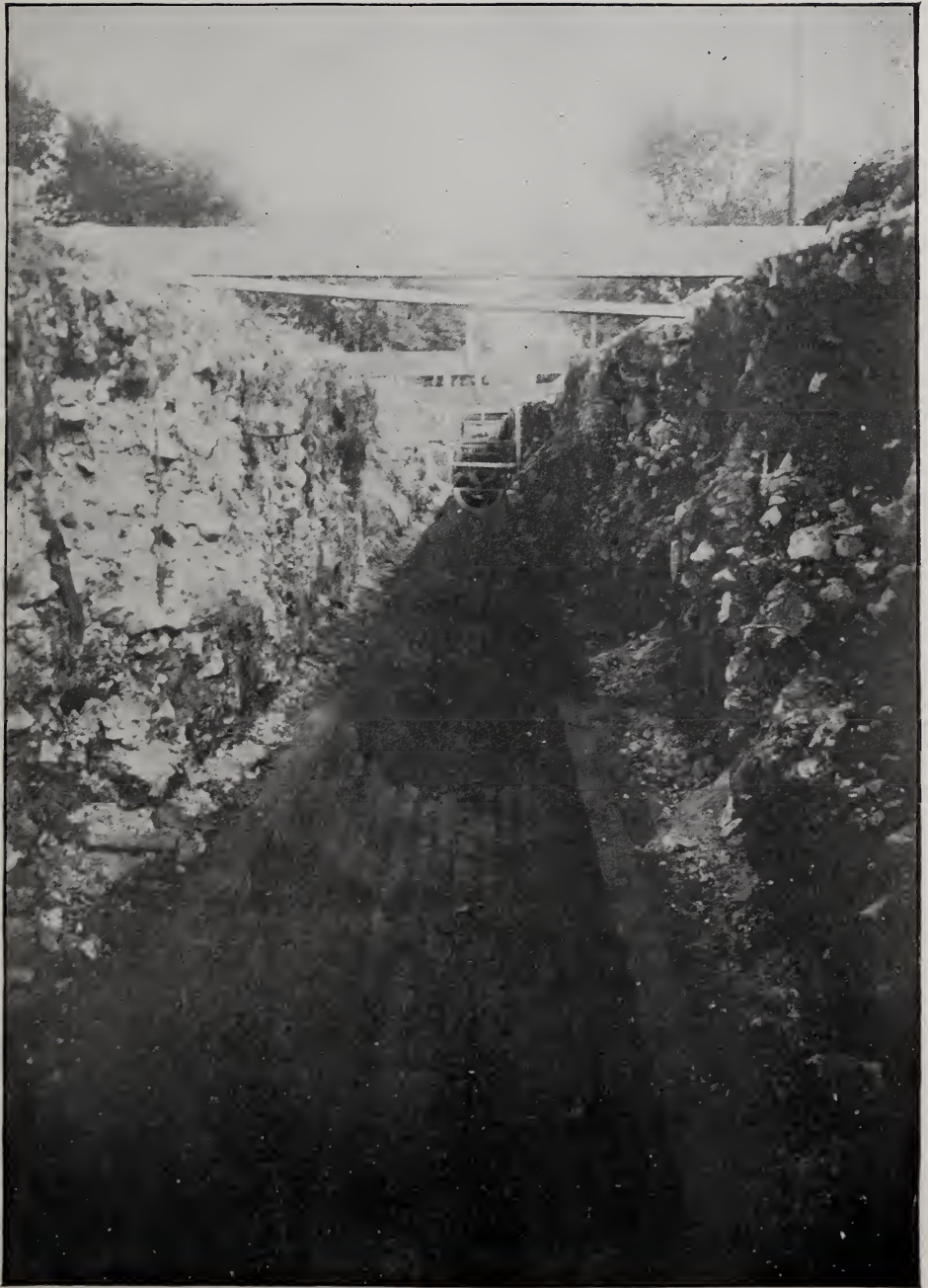
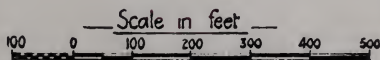
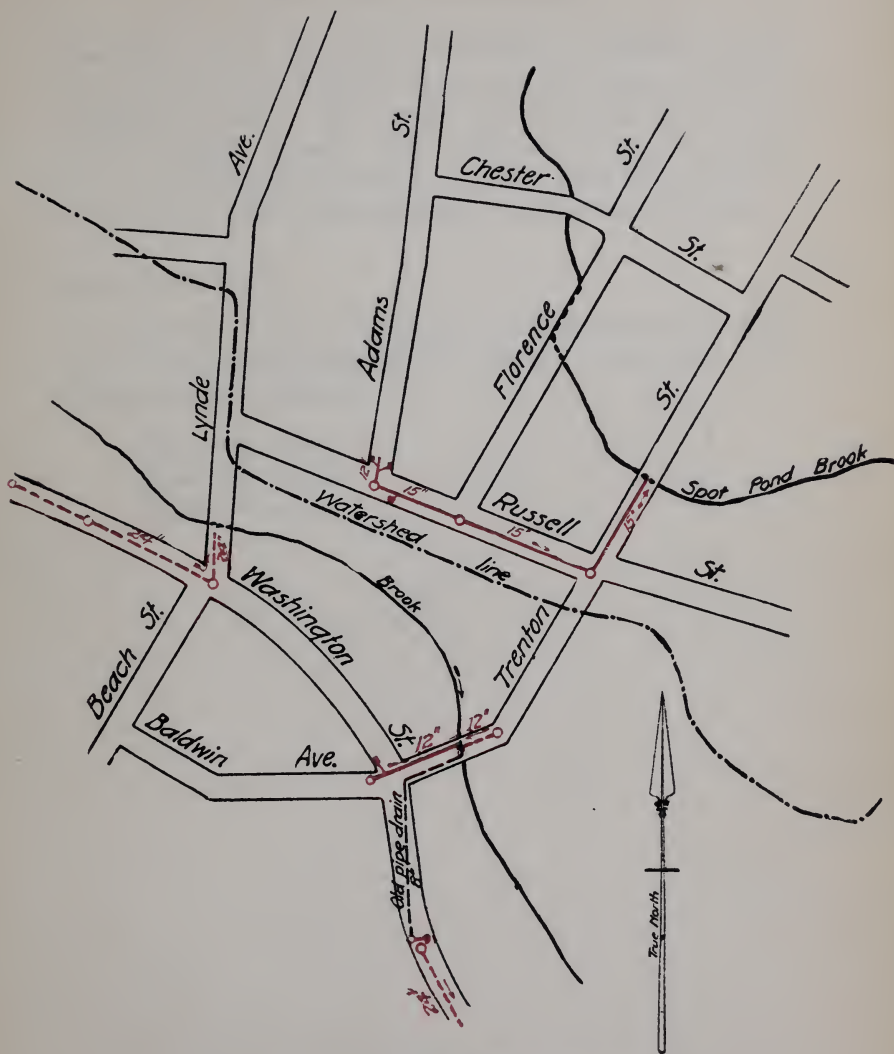
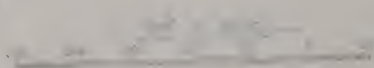


PLATE XVIII. Linden Street drain, 30 inch brick. Showing concrete invert.



— Russell St. & Washington St. Drain —
 Drains Constructed Shown thus: ————
 Proposed Future Extension " " - - - - -



Plan of the Washington St. Bridge
 Street Commission
 Proposed Bridge Location

considered one of the places desirable to remedy, as the cost was small, the benefits great, and the drain would be complete in itself. This drain was laid from Spot Pond brook through Trenton and Russell streets to Adams street, consisting of 524 feet of 15 inch drain and 26 feet of 12 inch drain, with three manholes and three catch-basins.

Miscellaneous Work.

In addition to the foregoing, catch-basins were constructed at several places and connected temporarily with existing drains as follows :

Winthrop street,	.	.	.	.	.	2
Wyoming avenue,	.	.	.	.	.	1
Upham street,	.	.	.	.	.	1

DETAIL BY STREETS OF WORK DONE, TOGETHER WITH ITS COST.

STREETS.	PIPE.													30" Conduit Brick and Concrete cu. yds.	Catch Basins.		Man Holes. cu. yds.	Cement		Exca- vation, cu. yds.	Cost.		Total.				
	4	5	6	8	10	12	15	16	18	20	24	Y's	Bends		In. ft.	Brick Masonry. cu. yds.		Sets.	Brick Masonry. cu. yds.		Frame & Key	Brick Masonry. cu. yds.		Portland. bbls.	Rose- dale. bbls.	Labor.	Material.
Adams street...	...	...	26	...	...	26	...	...	...	...	...	2	...	...	...	...	2	5.46	...	...	8	3	42	...	\$49.00	\$138.54	\$182.54
Bellevue avenue...	...	...	40	...	...	23	...	...	...	...	...	2	...	...	...	...	2	6.00	...	...	8	2	46	...	53.87	147.35	201.22
Botolph street...	6	20	...	...	...	68	...	...	...	...	...	...	...	...	...	...	1	2.79	1	1.66	2	2	43	12	104.15	116.97	221.12
B. & M. R. R. (at Cedar park)...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	22	119	...	111.70	279.31	391.01
Cedar park.....	...	...	62	...	...	22	*284	...	...	...	...	2	...	...	...	...	3	8.88	2	2.82	12	2	217	...	332.49	745.23	1,077.72
Essex street.....	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	5	80	...	143.00	157.99	300.99	
Green street (at brook).....	...	...	26	...	...	...	...	...	20	...	...	2	...	136	37	3	8.74	4	5.46	45	21	198	...	392.82	519.69	912.51	
Grove street....	...	...	38	...	...	68	26	...	...	...	...	3	1	...	...	4	11.38	2	3.77	19	7	83	...	146.92	324.48	471.40	
Gooch street....	10	4	4	...	...	14	...	...	306	...	...	1	2	...	...	2	5.83	1	1.65	9	4	326	5	299.05	395.41	694.46	
Laurel street....	30	46	8	...	...	...	...	...	196	640	...	3	3	...	...	4	11.33	4	7.42	23	11	944	5	797.94	979.86	1,777.80	
Lebanon street...	28	40	34	6240	...	...	...	...	...	...	...	82	3	14	...	...	2	5.86	4	7.98	15	8	245	...	285.02	392.88	677.90
Linden street...	...	...	...	...	...	...	...	...	...	...	...	...	...	245	80	...	...	1	1.18	65	60	420	...	684.66	478.00	1,162.66	
Right of Way off Lebanon street	...	...	...	...	...	...	...	...	...	...	...	...	...	137	34	...	...	...	...	5	67	248	...	300.20	251.25	551.45	
Russell street...	22	6	...	...	...	356	...	...	...	...	...	19	6	...	...	1	2.73	2	2.88	12	1	246	...	152.77	324.65	477.42	
Trenton street...	...	...	...	...	...	168	...	...	...	...	...	4	...	...	...	...	...	1	1.86	4	...	113	...	64.50	119.57	184.07	
Upham street at Dell avenue....	...	...	12	...	...	4	...	...	...	...	...	...	1	...	...	1	3.02	...	...	4	...	12	...	27.38	62.64	90.02	
Vinton street at Cedar park....	...	...	46	...	...	10	...	...	...	...	...	...	1	...	...	1	3.02	...	...	4	1	28	...	40.70	69.77	110.47	
West Hill avenue...	...	...	70	...	...	354	...	...	...	...	...	...	5	...	...	4	9.86	2	2.43	15	13	203	25	386.79	442.07	933.01	
Winthrop street.	...	...	16	...	...	...	...	...	...	...	...	...	2	...	...	...	7.40	...	...	4	2	20	...	43.63	123.29	166.92	
Wyoming avenue	...	...	28	...	...	26	...	...	...	...	...	...	1	...	...	...	1	3.02	...	...	5	1	25	...	36.00	81.64	117.64
Dell avenue.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	450	...	240.39	...	240.39	240.39
Totals	28	108	4	474	6	752	693	*284	196	134	182	53	26	518	151	33	95.32	26	41.51	266	227	4,108	47	\$4,692.98	\$6,145.59	\$10,838.57	

* Iron.

IMPROVED SURFACE DRAINAGE CONSTRUCTED TO JANUARY 31, 1902.

LOCATION.	Size in inches.	Length in feet.	Material.	No. of			Date Built
				M	H	C B	
Adams street north from Russell street	12	30	Akron pipe...	...	2		1901
Bellevue avenue south from Linden street.....	15	27	" "	...	2		"
Bellevue avenue northeast corner Emerson st. ....			.....	...	1		1900
Beech avenue west from Fairmount street.....	18	62	Akron pipe...	1	4		1901
Berwick street east side near Wyoming avenue .....			.....	...	1		"
Botolph street east from West Hill avenue....	15	68	.....	...	1	2	"
Boardman avenue at Bennett's Pond brook ...	60x38	44	con'r't culvert	...			"
Cedar Pk. & B. & M. R. R., Vinton to Essex st.	20	117	Akron pipe...	...			"
" " " " " " " "	20	120	Cast iron pipe	...			"
" " " " " " " "	16	284	" " " "	2	3		"
" " " " " " " "	15	24	Akron pipe...	...			"
Essex street north from Vine street	20	144	" " " "	2			"
Green street at brook, north from Linden street	30	136	Br'k & cement	3	4		"
" " " " " " " "	20	20	Akron pipe.....	...			"
" " " " " " " "	12	36	" " " "	...			"
Grove street in B. & N. R. R. tracks .....			.....	...	2		"
" " " at Lebanon and Gooch streets ...	15	30	Akron pipe...	...			"
" " " " " " " "	12	70	" " " "	2	4		"
Gooch street from Laurel to Grove street.....	20	306	" " " " ...	1	2		"
" " " " " " " "	12	16	.....	...			"
Hillside avenue at No. 64.....			.....	...	1		"
Laurel street from Lebanon street to Sta. 850..	20	642	Akron pipe...	4	4		"
" " " " " " " "	18	200	" " " "	...			"
" " " " " " " "	12	8	" " " "	...			"
" " " southeast corner Sixth street ...			.....	...	1		1900
Lebanon street south of Upham street.....			.....	...	2		"
" " " from Grove st. to Right of Way	24	82	Akron pipe...	4	2		1901
" " " " " " " "	12	246	" " " "	...			"
Linden street from Green street to Bellevue av	30	245	Brick & con'r't	1			"
Main street at Franklin street .....			.....	...	1		1900
" " " near West Linden street.....		60	Con'r't culvert	...			"
" " " " " " " "	15	90	" " " "	1	3		"
" " " in R. R. tracks at Dix pond.....			.....	...	2		1901
" " " " " " " Ell " .....			.....	...	2		"
Pearl street at Bennett's Pond brook	60x38	41	Con'r't culvert	...			"
Pleasant street at Gould street .....			.....	...	1		"
Porter street at Fletcher street in R. R. tracks			.....	...	1		"
Right of Way, west from Lebanon near Laurel st	30	137	Brick	...			"
Right of Way from Botolph to Franklin streets	15	357	Akron pipe...	2	1		1898
Russell street from Adams to Trenton street ..	15	394	" " " " ...	2	1		1901
Tremont street at low point .....			.....	...	1		"
Trenton st. from Russell st. to Spot pond br'k	15	176	Akron pipe...	...			"
Trenton street from Washington st. to brook..	12	150	" " " " ...	1	1		"
Upham street at southwest corner Dell avenue	15	6	" " " "	...	1		"
Vinton street.....	12	12	" " " "	...	1		"
West Hill av. from Botolph st. to Chaska av..	12	364	" " " " ...	2	4		"
Winthrop street at low point	12	4	" " " "	...	2		"
Wyoming avenue east from B. & M. R. R.....	15	28	" " " "	...	1		"

Summary.—936 ft. 12 inch Akron pipe. 1,200 ft. 15 inch Akron pipe. 284 ft. 16 inch iron pipe. 262 ft. 18 inch Akron pipe. 1,229 ft. 20 inch Akron pipe. 120 ft. 20 inch iron pipe. 82 ft. 24 inch Akron pipe. 518 ft. 30 inch circular conduits, brick and concrete. 29 manholes, 61 catch basins, 3 culverts, concrete and I beams.

NOTE.—Nine of the above catch basins are built in the tracks of the B. & N. St R. R. Co.

All the foregoing work has been done by day labor, at an expense of \$4,692.98. If the work had been done by contract, at prices the same as paid F. E. Ellis for sewer construction, it would have cost \$5,117.37, or \$820.39 more, as shown by the estimate given below.

Estimated value of work done, based on contract prices:

28 feet 4 inch pipe laid @ 4 cts.,	.	.	.	\$	1	12
108 " 5 " " " " 5 "	.	.	.		5	40
474 " 8 " " " " 6 "	.	.	.		28	44
6 " 10 " " " " 7 "	.	.	.		42	
752 " 12 " " " " 8 "	.	.	.		60	16
6 " 10 " " " " 7 "	.	.	.		42	
752 " 12 " " " " 8 "	.	.	.		60	16
693 " 15 " " " " 8 "	.	.	.		55	44
284 " 16 " " " " 8 "	.	.	.		22	72
196 " 18 " " " " 8 "	.	.	.		15	68
1341 feet 20 " " " 15 "	.	.	.		201	15
82 " 24 " " " 15 "	.	.	.		12	30
151 cubic yards concrete masonry @ \$4.00,	.	.	.		604	00
136 " " brick " 5.00,	.	.	.		680	00
4108 " " earth excavation " .88,	.	.	.		3,615	04
47 " " rock " 4.50,	.	.	.		211	50

\$5,513 37

In performing this work, all the stock, except granite catch-basin covering stones, was purchased and paid for from other appropriation and charged to surface drainage, as used.

It was estimated that 40 sets of these covering stones would be required and prices were solicited as follows:

Stevens Granite Co., Milford, N. H.,	\$25.00 per set.
F. E. Newhall, Wakefield, Mass.,	\$25.00 per set.

The prices obtained in this way were so much more than estimated, and the amount (\$1,000.00) so large that it came under the provision of the charter requiring purchase by advertisements; therefore these proposals were rejected and others advertised for, and bids received as follows:

NAME AND ADDRESS.	Quantity.	Price.	Amount.
Duncan Rusk, Melrose, Mass.	40 sets.	\$27.50	\$1,100.00
Stevens Granite Co., Milford, N. H.	40 sets.	27.00	1,080.00
Chas. A. Bailey, Suncook, N. H.	40 sets.	30.00	1,200.00

STATEMENT OF RECEIPTS AND EXPENDITURES.

Appropriation (Order 1279),	\$10,000 00
" (Order 1435),	750 00
Transferred from Highway Division,	639 19
Received from Boston & Northern R. R. for	
C. B., Green street,	24 84
Received for stock to Highway Division,	288 65
" " overcharge Sewer Division,	16 00
	\$11,718 68

Expended.

Recording deeds,	\$6 65
Contract and specifications,	32 50
Blue prints,	3 93
Oil and sundries,	29 19
Expressage,	95
Hardware,	2 95
Powder and exploders,	32 79
Tools,	31 30
Car fare,	5 05
Blacksmithing,	75 08
Lumber, J. P. Deering & Co.,	75 84
Granite C. B. stone and freight,	1,080 00
Brick and cement, S. E. Benson & Co.	489 00
" " " C. B. & F. H. Goss,	13 50
Amounts carried forward,	\$1,878 73
	\$11,718 68

Amounts brought forward,	\$1,878 73	\$11,718 68
Brick, J. Robbins & Co.,	518 91	
" C. J. Belden & Co.,	151 27	
Forms, L. L. Libby & Co.,	63 10	
Cast iron pipe and frt., Camden Iron Works,	260 02	
Cast iron pipe and repairs, Water Division,	438 10	
Castings, Osgood & Witherly,	290 25	
Drain pipe and cement, Sewer Div.	2,799 94	
Stock and teams, Highway Division,	62 27	
Labor under tracks, B. & M. R. R.	17 00	
Concrete repairs, C. L. Hoffman,	6 33	
Brick masonry, J. Martin & Lynch,	682 35	
Labor as per pay rolls,	4,036 10	
		\$11,204 37
Cash balance in treasury,		\$514 31

NOTE:— Expended as per detailed statement by		
streets,	\$10,598 18	
Expended since on Leonard's brook,	240 39	
" for sundries not included in		
report by streets,	77 15	
Expended for stock which was sold to		
Highway Division and for which		
credit is given,	288 65	
		\$11,204 37

SCHEDULE OF ALL EXISTING OLD DRAINS.

STREET.	Location.	Size in Inches.	Length in Linear Ft.	Material.	No. Man Holes.	No. Catch Basins.	Condition.
Albion street..	Day street to Franklin street ..	15	350	Akr'n	...	2	 good
Appleton " ..	Irving street, east.....	10	220	"	...	...	 fair
Botolph " ..	West Hill av. to Right of Way.	8	60	"	...	...	 bad
Baxter " ..	Whittier street to Tappan st...	10	300	"	...	1	 poor
Berwick " ..	Ell pond brook to Foster st ...	15	1,200	"	...	7	 good
Beech avenue..	Irving street to Lebanon street	12	210	"	...	1	 fair
" " ..	" " " " " " " "	10	330	"	...	...	 fair
Cleveland street	Wyoming avenue to Foster st..	8	550	"	...	7	 bad
" " ..	10.....	10	850	"	...	...	 bad
Cottage street.	Brook to Foster street	8	750	"	...	6	 poor
" " ..	" " " " " " " "	10	950	"	...	...	 poor
Cedar park....	Vinton st., east to B & M R. R.	10	400	"	...	4	 very bad
Cutter street..	South from Sanford street....	12	255	"	1	...	built in 1901
Dell avenue....	Grove street to culvert.....	12	280	"	...	1	 poor
Emerson street	Cedar Park to Myrtle street...	12	1,120	"	2	11	 poor
" " ..	Lebanon st. to Ell pond brook.	10	250	"	...	2	.....
Essex street...	Myrtle street to Main street...	15	600	"	...	3	.....
" " ..	Vine street to Myrtle street ...	12	884	"	...	6	.....
Franklin " ..	Right of Way to Warren street.	10	397	"	...	2	 fair
" " ..	" " " " " " " "	15	73	"	...	...	 fair
" " ..	Pratt street to Albion street...	8	160	"	...	3	 good
" " ..	Albion street to Sargent street.	15	190	"	...	2	 good
" " ..	Belmont street to brook.....	12	136	"	...	2	 good
Florence " ..	Wyoming avenue to Foster st..	8	1,320	"	...	6	 poor
Foster " ..	Berwick street to Willow street	15	150	"	...	3	 good
" " ..	Dills court to Ell Pond brook...	10	450	"	...	5	 good
Grove " ..	E. side Meridian st. to Dell av.	12	1,660	"	...	9	 bad
" " ..	Myrtle street to Ell pond brook	8	200	"	...	4	.....
Hurd " ..	Cottage & Circuit sts. to culvert	10	830	"	...	3	 poor
Heywood av...	Main street to Starbird street..	10	350	"	...	2	 fair
Hawes avenue.	Frost avenue to Boardman av..	15	260	"	...	2	 good
Harvard street.	Right of Way to Right of Way.	10	100	"	...	2	 good
Henry avenue..	Highland av. to Richardson rd.	12	620	"	...	1	 good
Hamilton road.	Met. park to low point.....	15	620	"	...	6	.....
" " ..	" " " " " " " "	18	36	"	...	...	.....
Highland av...	Corner of Henry avenue.....	...	...	"	...	2	 poor
Irving street...	Right of Way S. to Appleton st	10	400	"	...	2	 good
Leeds " ..	Perkins street S. to brook....	12	200	"	...	1	.....
Lebanon " ..	Washington school to Grove st.	10	120	"	...	2	.....
" " ..	Beech avenue south to culvert.	12	220	"	...	1	.....
Meridian " ..	Grove street, south.....	8	300	"	...	2	 good
" " ..	Malvern to Rogers street.....	10	300	"	...	1	 good
Main " ..	Winthrop st. to Dix pond drain	12	300	"	...	2	 poor
Myrtle " ..	Essex st. to Emerson street....	8	820	"	...	2	 poor
Mystic avenue.	Glen avenue to Summer street.	10	700	"	...	4	 fair
Otis street....	Charles street to Vinton street	18	60	"	...	1	 fair
" " ..	" " " " " " " "	24	740	"	1	2	 bad
" " ..	" " " " " " " "	20	290	"	2	1	 bad
Private land...	Baxter street to Spot pond br'k	18	330	"	...	...	 poor

SCHEDULE OF ALL EXISTING OLD DRAINS.—*Continued.*

STREET.	Location.	Size in Inches.	Length in Linear Ft.	Material.	No. Man Holes.	No. Catch Basins.	Condition.
Private land...	Dix pond to Ell pond brook...	15	500	Akr'n	...	4	 fair
" " ..	Cedar park to Essex street	10	94	"	...	...	.....
" " ..	" " " " " " " " " " " "	10	100	Iron	...	...	.....
" " ..	Washington. st to Ell and & Spot pd. br'k near Malden line	18	350	Akr'n	1	2	 good
" " ..	Main street near Sylvan street to B & M R. R.	10	450	"	...	3	 bad
" " ..	Holland rd. toward Hamilton rd	10	245	"	...	2	.....
" " ..	" " " " " " " " " " " "	8	20	"	...	...	.....
" " ..	Hamilton rd. to Charles street.	18	85	"	...	1	.....
" " ..	" " " " " " " " " " " "	20	128	"	...	...	.....
" " ..	" " " " " " " " " " " "	...	150	"	...	...	.....
" " ..	Beech avenue to Meridian st...	10	770	"	...	...	.....
" " ..	North avenue to Walton park..	24	200	"	...	...	.....
" " ..	Cutter street to Whittier street	12	203	"	...	...	built in 1901
" " ..	B&M R.R. at Melrose st. to br'k	10	800	"	...	1	.....
Private way...	Emerson street to Otis street..	18	700	"	...	...	 fair
Right of way..	Hawes avenue, west	15	124	"	...	...	 good
" " " ..	Russell street to brook.....	8	115	"	...	2	 fair
" " " ..	City line across North avenue.	15	220	"	1	...	 fair
" " " ..	" " " " " " " " " " " "	18	140	"	...	...	.....
" " " ..	Lebanon street to Harvard st..	18	200	"	...	...	 good
" " " ..	Harvard street to Irving st...	18	200	"	...	2	 good
Richardson rd.	Henry avenue, north.....	12	250	"	...	3	 good
Sargent street.	Franklin street to Briggs street	12	1,450	"	...	4	 good
Summer " ..	Mystic avenue to Linwood av..	12	370	"	...	2	 fair
Trenton " ..	Russell street, s. to brook....	8	400	"	...	...	 good
" " " ..	Spot pond brook to Foster st..	10	1,880	"	...	...	 good
" " " ..	Washington street to brook ...	8	120	"	...	2	 fair
Tappan " ..	Baxter street to Maple street..	8	600	"	...	5	 poor
" " " ..	" " " " " " " " " " " "	10	470	"	...	...	 poor
Tremont " ..	Emerson street to Ell pond....	15	780	"	...	...	 fair
Upham " ..	Main street to brook.....	15	526	"	...	3	 fair
Vinton street..	Oakland street to Otis street ..	8	370	"	...	3	 poor
" " " ..	Otis street to Youle street....	8	230	"	...	2	 poor
Wyoming av...	Pleasant st. to Ell pond brook.	10	200	"	...	4	 fair
" " " ..	Ell pond brook to Chestnut st.	8	800	"	...	7	 poor
" " " ..	Florence st. to Spot pond brook	8	280	"	...	3	 fair
Whittier street.	Sanford street to Baxter street	8	220	"	...	3	 poor
" " " ..	" " " " " " " " " " " "	12	130	"	...	...	 poor
Winthrop street	Myrtle street to Main street ...	12	740	"	...	...	 bad
Winthrop place	Off Franklin street.....	10	200	"	...	2	 good
Warren street..	Franklin street to brook	15	350	"	...	2	 fair
West Hill av...	Botolph street to Chaska av...	8	290	"	...	3	 bad
Woodlawn av...	Franklin street to Clifton park	8	710	"	...	5	 poor
Washington st.	Trenton street, south.....	8	300	"	...	2	 fair
" " " ..	near Metropolitan park road...	15	76	"	...	...	built in 1900
" " " ..	at Beech avenue	24	36	"	...	1	built in 1900

UNIMPROVED SURFACE DRAINAGE SYSTEM.

SUMMARY OF SCHEDULE.

	8615 feet of	8 inch.	
12056	" " 10	"	
100	" " 10	"	iron.
9023	" " 12	"	
6239	" " 15	"	
2241	" " 18	"	
418	" " 20	"	
976	" " 24	"	
209	Catch basins—as per list.		
52	" " —scattering not included in the list of streets.		

NOTE :—The foregoing table is an approximate estimate of the existing surface drainage system.

Some of the lines have been uncovered and inspected ; others are given on the authority of preceding officials.

In nearly all cases the points where the changes in size occur are assumed.

So far as can be ascertained, a very small per cent. of the lines are laid on proper lines of grades.

SIDEWALKS.

Section 2 of Chapter 21 of the City Ordinances reads as follows:

All sidewalks built after April 1st, 1900, shall be constructed of brick or such other material as shall be recommended by the Engineer and Superintendent of Public Works, and shall have a granite curbstone set along the gutter or outside edge unless the board of aldermen shall specify sidewalks or curbs in certain cases to be built of other material or the curb omitted.

In accordance with this ordinance brick has almost universally been recommended to abutters applying for sidewalks, but owing to its greater cost few have been willing to substitute it for the concrete walk which is now so prevalent all over the city. Believing that in the long run the brick walk will prove to be cheaper, it seems extravagant to continue or perpetuate the old concrete walk, especially in the central sections of the city.

A great many people who already had a concrete walk have applied to have a curbstone set along its outer edge; in fact, more than one-half the money expended for new individual walks the past season has been for curbstone, which would seem to prove that the action of the city in adopting an ordinance for putting this in and paying one-half the cost is popular.

In this connection I wish to suggest the advisability of changing the ordinance relative to sidewalks, so that a portion of the expense of constructing gravel walks could be charged to the abutters. Under the present arrangement the department is over-run with applications for gravel sidewalks, and to such an extent, that the appropriation is insufficient to attend to all requests, and consequently only those most needed can be built, and parties whose requests are not complied with are apt to feel that they have been slighted and their request not properly considered.

If the ordinance was changed, as suggested, and each applicant required to deposit an amount equal to one-half the estimated cost of the gravel walk applied for, it would not only tend to decrease the number of applications for work of this nature, but would also increase the funds available, and would further permit the department to use each applicant alike and prevent the ill-feeling that sometimes now exists.

I also wish to call attention to Section 19 of Chapter 25 of the City Ordinances, which reads as follows :

The tenant, occupant, and in case there be no tenant, the owner or person having the care of any estate abutting on any street, in the business sections of the city within such limits as may be designated by the engineer and superintendent of public works shall, after the ceasing to fall of any snow thereon, or in case snow has fallen from some adjoining building or drifted thereon, cause the same to be removed within eighteen hours. The sidewalks adjoining public buildings or grounds shall be cleared under the direction of the engineer and superintendent of public works, who shall likewise see that sand or some suitable material is placed on sidewalks made dangerous by ice.

I respectfully recommend that this section of the ordinance be reconsidered and that the words "in the business

section of the city" be omitted, or that the limits of the business section be more definitely defined; and further, that some penalty be imposed for non-compliance.

I also suggest that the last clause of this section, which refers to sanding sidewalks, be omitted.

Contracts.

Owing to the lack of a city yard, contracts for materials in large quantities could not be made, and were necessarily purchased in small quantities. If the city had ample room for storage, materials could be purchased in larger quantities, be stored at the yard, and used when needed.

I also believe that in the purchase of brick and curbing, better prices would be obtained if contracts could be made in the fall. Under present conditions, curbing has been purchased from time to time as required for each specific piece of work, as applied for by the abutter or as ordered by the Board of Aldermen, and usually would not be delivered until from two to four weeks later.

Prices were solicited, and as a result brick were purchased of Frederick Stocker of East Saugus, for \$10.75 delivered on the work, and laid by Eugene McCarthy for \$3.50 per 1,000; curbing of F. E. Newhall of Wakefield, for 45 cents per lin. ft. of straight curb and 65 cents per lin. ft. of curved curb delivered on the work.

Advertisements for concreting were inserted in the local papers, bids received and opened April 22, 1901.

KIND.	Robert Philpot.	F. W. Hoffman.	Norris & Co.	C. L. Hoffman.
Crossings.....	\$0.40	\$0.43	\$0.365	\$0.40
Sidewalks	0.35	0.33	0.345	0.34
Repair crossings...	0.40	0.43	0.365	0.40
Repair sidewalks ..	0.35	0.33	0.345	0.34
Top dressing	0.20	0.18	0.18	0.17

The bid of C. L. Hoffman was accepted.

Three new continuous walks begun in 1900, six continuous walks ordered by the board of aldermen in 1901, and 31 individual walks have been completed.

The walk on the north side of Franklin street was not completed, owing to the fact that before the numerous poles located there were moved by the various companies owning them, winter had set in.

The work on the west side of Rowe street opposite land of W. A. Lynde was also left in an incomplete condition, the curbing being set and the walk graded, but the concrete omitted on account of the weather.

On October 10, 1901, the board of aldermen passed an order authorizing curbing to be set on the east and west sides of Main street from Foster to Grove streets. On account of being unable to procure curbing for immediate use at a reasonable expense, the work was not begun.

The appropriation for sidewalks was made under four separate heads, viz:

- Repair of present walks.
- New individual walks.
- To complete walks already begun.
- New continuous walks.

Repair of Present Walks.

2523.71 square yards taken up and replaced with new.

2547.91 " " top dressed.

STATEMENT OF RECEIPTS AND EXPENDITURES.

Appropriation,	\$500 00
“ July 3, 1901, (Order No. 1250), .	500 00
“ Sept. 23, “ “ “ 1871), .	300 00
Cash received from Tremont street walk, . . .	163 44

\$1,463 44

Expended:

Labor as per pay rolls,	\$64 09
Advertising,	1 50
Concreting, C. L. Hoffman,	1,291 19
	<u>\$1,356 78</u>
Cash balance in treasury,	\$106 66

New Individual Walks.

Walks have been constructed in front of 31 estates, 18 of which were for new walks with curb, and 13 for curb-stone along old walks. The setting of curbing along the line of old walks generally necessitates reconcreting, and as the cost of this work, which amounted to \$261.33, cannot, by law be assessed upon the abutter, it has been considered a part of "repair of present walks," and paid for out of that appropriation.

STATEMENT OF COLLECTIONS.

W. DABNEY HUNTER,

DR.

To one half actual cost,	\$1,125 79	
" inside work,	19 73	
		\$1,145 52

CR.

By cash paid Treasurer,	\$1,116 05	
" one half of work not assessable,	15 04	
" amount uncollected,	14 43	
		\$1,145 52

INDIVIDUAL SIDEWALKS.

No.	Abutter.	Location.	Cost.	Assessed.
1	Stephen R. Sircom...	81 Linden street.. . . .	\$47.78	*\$26.80
2	Mrs. E. H. Curtis....	384 Main street	36.12	18.06
3	Larkin L. Davis.....	Laurel street	37.94	18.97
4	Mrs. Mary A. Foster..	223 West Emerson street	113.57	56.79
5	J. A. Wyman.....	Laurel street.....	37.94	18.97
6	J. H. Gerrish.....	25 Farwell street.....	90.31	45.16
7	D. W. Fitzpatrick....	49 Upham street.....	32.72	16.36
8	Frederick C. Page..	Laurel street.....	75.88	37.94
9	Caroline A. Lamphrey	87 Crescent avenue.....	41.01	20.51
10	C. L. Sprague.....	116-118 Myrtle street...	73.04	†41.02
11	Mrs. J. L. Campbell..	35 Harvard street	37.72	†22.66
12	C. M. Cox.....	Franklin street.....	62.52	31.26
13	Geo. Lyall.....	203 E. Foster street....	55.13	27.57
14	School Dept.....	Maple street.....	139.70	\$55.93
15	"	Florence street.....	262.61	131.31
16	Mary C. Barton.....	Malvern street, cancelled	.....	.....
17	Robert Philpot	76 Dell avenue.....	85.52	42.76
18	Mrs. E. M. Gordon...	64 Hillside avenue.....	61.34	30.67
19	Lewis A. Dow	131 Upham street.....	48.78	24.39
20	Edward S. Page.....	Upham st. cor. Dell av..	62.59	31.30
21	Salt & Allmon	3 and 7 Cass street.....	87.13	43.57
22	J. J. Garrett	11-15-19 Cass street.....	119.59	¶64.84
23	Emery Close.....	234 West Emerson st....	45.00	22.50
24	Olive W. Allen.....	264 Grove st., cancelled..	.....	.....
25	M. F. Eastman.....	480 Lebanon street.....	40.51	20.26
26	A. F. Evers.....	Ferdinand street.....	166.59	83.30
27	Chas. C. Swett.....	132 Rowe street.....	35.20	17.60
28	Dr. J. S. Clark.....	Malvern street.....	45.75	22.88
29	Wm. J. Bowser.....	Malvern street.....	34.50	**16.13
30	James Pope.....	219 W. Emerson street..	90.59	45.30
31	C. D. Cecca.....	51 Upham street.....	30.97	15.49
32	Geo. W. Burke	Green street.....	33.89	16.95
33	A. C. M. Currier.....	Main street, cancelled...	.....	.....
34	Mrs. S. C. Gwynne...	Botolph street.....	119.49	††63.23
Totals.....		.....	\$2,251.43	\$1,130.48

NOTE.—In amount assessed, \$19.73 is included for work done inside, all of which was charged to the abutter, and is not included in the column of cost.

NOTE.—In the column of cost, \$30.08 is included, none of which is assessable.

Owing to fractions the amount assessed is 8 cents larger than one half the cost.

* \$2.91 paid for inside work.

† \$4.50 paid for inside work.

‡ \$3.80 paid for inside work.

§ \$13.92 credit for old concrete walk.

|| \$5.04 paid for inside work.

** \$1.12 credit for old concrete walk.

†† \$3.48 paid for inside work.

NEW INDIVIDUAL WALKS.

Appropriation,	\$700 00	
" (Order No. 1250),	1,000 00	
" " " 1871),	500 00	
		\$2,200 00
Cash receipts paid treasurer		
July 16, 1901,	\$500 00	
Cash receipts paid treasurer Oct.		
28, 1901,	350 00	
Cash receipts paid treasurer Jan.		
4, 1902,	239 97	
Cash receipts paid treasurer		
Feb. 11, 1902,	26 08	
		1,116 05
Cash from sewer division for		
brick,	\$25 80	
Cash from new concrete walks,		
(error in P. R.),	23 78	
		49 58
		\$3,365 63

Expended:

For labor as per pay rolls,	\$680 94	
" curbing, F. E. Newhall,	1,409 27	
" " L. A. Dow,	44 62	
" brick, Frederick Stocker,	169 63	
" concrete work, C. L. Hoffman,	276 88	
" " " Robert Philpot,	31 11	
" laying brick, Eugene McCarthy,	46 83	
" cement, sewer division,	5 55	
" teams and crushed stone, highway		
division,	37 22	
For car fares,	95	
" printing and incidentals,,	12 75	
		2,715 75
Cash balance in treasury,		\$649 88

Continuous Walks.

This appropriation was made in two parts, one to complete sidewalks begun, but owing to lack of funds, not completed in 1900, the other for such walks as might from time to time be ordered by the Board of Aldermen. A statement of the receipts and expenditures of each part of the appropriation is given separately, but the work done is reported on as a whole.

STATEMENT OF RECEIPTS AND EXPENDITURES.

TO COMPLETE CONTINUOUS WALKS BEGUN.

Appropriation,	\$800 00	
Expended :		
For brick, Frederick Stocker,	\$240 45	
" laying brick, Eugene McCarthy,	110 85	
" curbing, F. E. Newhall,	28 09	
" sand, C. L. Hoffman,	56 47	
" Highway teams,	2 34	
" labor as per pay rolls,	73 59	653 79
Amount transferred to treasury, (Order No. 1424)	\$146 21	

NOTE:—Of the amount expended as above (\$653.79), there was expended to complete Main street, from Green street to Highland avenue \$519.02; Chester street, Florence to Trenton street, \$56.47, and Lake avenue, Emerson street, north, \$78.30.

STATEMENT OF RECEIPTS AND EXPENDITURES.

NEW CONTINUOUS WALKS.

Appropriation,	\$1,000 00	
" (Order No. 1250.)	500 00	
" " " 1366.)	669 00	
		<u>\$2,169 00</u>
Expended :		
For curbing, F. E. Newhall,	\$781 10	
" concreting, C. L. Hoffman,	335 27	
" Highway Div. teams and stock,	26 91	
" new indiv. walks (error in pay roll.)	23 78	
" car fares and team,	1 80	
" labor as per pay rolls,	256 69	
		<u>\$1,425 55</u>
Cash balance in treasury,		\$743 45

COST OF WORK IN DETAIL, TOGETHER WITH THE
AMOUNT ASSESSED ON EACH ABUTTER.

Ferdinand Street, east side from Franklin street, to walk of Towle. (Order No. 225).

Total cost:

413.90 linear feet, straight curb			
@ 40 cts.,	\$165	56	
287.50 linear feet, curved curb			
@ 60 cts.,	172	50	
701.40 linear feet, setting @			
20 cts.,	140	28	
463.18 square yards, concrete, @			
35 cts.,	162	11	
30.01 square yards concrete, @			
15 cts.,	4	50	
Guard rail:—Labor,	\$43	67	
Stock,	49	03	
			92 70
Retaining wall,	115	00	
Grading:—Labor,	\$24	75	
Stock,	4	20	
			28 95
			\$881 ⁸ / ₁₀₀ 60

Cr. by work charged to high-
way appropriation:

Guard rail,	\$92	70	
Retaining wall,	115	00	
Grading,	28	95	
			236 65

Cr. by work charged to Side-
walk Division (not assess-
able):

C. H. Prescott (old walk replaced),	\$13	99	
Joseph Moore, (old walk replaced),	14	17	
Geo. E. Towle, (old walk replaced),	87	29 03	265 68
			\$615 92
Less one-half paid by city,			307 96

Amount carried forward, \$307 96

Amount brought forward, \$307 96

Assessed upon abutters as follows:

C. H. Prescott,		\$44 645	
Harry Bickford,		47 83	
Abel R. Renton,		36 08	
A. E. Pingree,		29 60	
Joseph Moore,		16 875	
John W. Nowell,		46 765	
Geo. H. Towle,		44 50	
Willard Welch,		41 67	
			\$307 965

Main Street, east side from Green street to
Highland avenue, (Order No. 296),

Total cost:

684.64 linear feet, straight curb			
@ 40 cts.,	\$273 86		
64.98 linear feet curved curb @			
60 cts.,	38 99		
27,500 brick @ \$10.75,	295 62		
Laying " " 3.50,	96 25		
Setting 749.62 linear feet curb			
@ 20 $\frac{3}{10}$ cts.,	152 13		
Grading walk,	44 37		
35 double loads sand, @ \$1.20,	42 00		
			943 22

Cr. by work not assessable, 14 62

\$928 60

Less am't paid by city $\frac{1}{2}$ cost, \$464 30			
Less one-half cost inside work, 2 13	462 17	466 43	

Assessed upon abutters as follows:

James F. Fernald,	\$ 37 08		
Eliza J. Sawyer,	35 67		
Georgianna I. Nyman,	31 35		
Amts. carried forward,	\$104 10	\$774 39	

Amts. brought forward,	\$104 10	\$774 39
M. G. Cochrane,	28 06	
Alice I. Calkins,	54 82	
Adelaide L. Burke,	37 92	
Warren Hapgood,	75 95	
Charles A. Kennedy,	37 92	
Matthew I. Lans,	127 66	
		\$466 43

Chester Street, north side from
Trenton street to Florence street, (Order No. 273.)

Total cost:

252.12 linear feet, straight curb		
@ 40c.	\$100 85	
6.00 linear feet, curved curb		
@ 60c.	3 60	
166.10 square yards. concrete		
@ 34c.	56 47	
Setting 258.12 linear feet @		
14c.	36 14	
		\$197 06
Less one-half paid by city,		98 53
		98 53

Assessed upon abutters as follows:

Sarah H. Sprague,	\$ 23 98	
Cordelia E. Dickinson,	19 33	
Anna D. Hayden,	19 33	
Andover Savings Bank,	35 89	
		\$98 53

Lake Avenue, Emerson street,
north, (Order No. 341.)

Total cost:

152.00 linear feet straight curb		
@ 40c.	\$60 80	
12.50 linear feet curved curb		
@ 60c.	7 50	
Amts. carried forward,	\$68 30	\$872 92

Amts. brought forward,	\$68 30	\$872 92
Setting 164.50 linear feet curb.		
@ 20c.	32 90	
Grading,	29 17	
4,170 brick @ \$10.75,	44 83	
Laying brick @ \$3.50,	14 60	
		\$189 80
All of which abuts on city land.		

Lebanon Street, east side, (Order
No. 488½).

Total cost:

65.99 linear feet straight curb		
@ 45c.	\$29 69	
Setting 65.99 linear feet curb		
@ 21c.	13 88	
46.00 square yards concrete		
@ 34c.	15 64	
		\$59 21
Less one half paid by city,	29 61	
		29 60
Assessed upon abutter:—		
Estate George Lynde.	\$29 60	

West Linden Street, north side
from Green to Main street,
(Order No. 410).

Total cost:

442.16 linear feet straight curb		
@ 45 cts.,	\$198 98	
29.76 linear feet curved curb, @		
65 cts.	19 34	
29.17 linear feet curb for steps, .	13 12	
471.92 linear feet setting @		
15½ cts.,	71 74	
Amounts carried forward,	\$303 18	\$902 52

Amounts brought forward, \$303 18	\$902 52
415.91 square yards concrete @	
34 cts.,	141 41
Grading banks of abutters,	22 86
Steam roller,	3 00
Teaming and labor,	76 85
Water services and pipes,	16 48
	\$563 78

Cr. by work charged to Highway

Appropriation:

Grading banks of abut-	
ters,	\$22 86
Steam roller,	3 00
Teaming,	10 63
Labor as per pay roll,	66 22
29.17 linear feet curb for	
steps,	13 12
	\$115 83

Cr. by work charged to Water

Appropriation:

Lowering water services and re-	
laying pipe,	16 48

Cr. by work charged to new
concrete walks:

94.46 square yards concrete	
@ 34 cts.,	32 12
	164 43
	\$399 35
Less one-half paid by city,	199 67
	\$199 68

Assessed upon abutters as
follows:

Lucy P. Coffin,	\$90 18
C. F. Smith,	20 95
F. A. Smith,	41 71
Georgianna B. Everson,	46 84
	\$199 68

Amount carried forward,		\$1,102 20
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Amount brought forward, . . . \$1,102 20

Lebanon and Lynde Streets, (Washington
School, Order No. 981).

Total cost:

304.82 linear feet straight curb		
@ 45 cts.,	\$137	17
71.96 linear feet curved curb		
@ 65 cts.,	46	77
Setting 376.78 linear feet curb		
@ 17 cts.,	64	07
Grading and surfacing walk, .	43	25
Rebuilding stone catch-basin		
and changing drain, . . .	16	17
		307 43

Cr. by work charged to new		
concrete walks,	16	17

\$291 26

Less one-half paid by city, .	145	63

145 63

Assessed upon abutter as follows:

City of Melrose, School Depart-		
ment,	\$145	63

Franklin Street, north side from Main
street to Howie court, (Order
No. 1320).

Total cost:

168.83 linear feet straight curb		
@ 45 cts.,	\$75	97
50.94 linear feet curved curb @		
65 cts.,	33	10
Setting 219.77 linear feet curb @		
21.79 cts.,	47	88
Repairing paved gutter, . . .	6	12
		163 07

Amount carried forward, .	\$1,247	83
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Amounts brought forward, . . .	\$163 07	\$1,247 83
Cr. by work charged to Highway Appropriation:		
Repairing paved gutter, . . .	\$6 12	
Existing curb, 15.64 feet @		
45 cts.,	7 04	
		13 16
	\$149 91	
Less one-half paid by city, . . .	74 96	
		74 95

Assessed upon abutters as follows:

Daniel H. Howie,	\$20 33	
Seamen's Savings Bank, . . .	15 35	
Emma L. Wood,	39 27	
		\$74 95

Malvern Street, south side, from No. 103
to Meridian street, (Order No 551).

Total cost:

183.73 square yards concrete @		
34 cts.,	62 47	
Less one-half paid by city, . . .	31 24	
		31 23

Assessed upon abutters as follows:

J. S. Clark,	\$18 99	
J. S. and Eliza I. Clark, . . .	10 23	
Mary C. Barton,	2 01	
		\$31 23

East Foster Street, from No. 185 to No. 203,
(Order No. 1270).

Total cost:

163 linear feet straight curb @		
45 cts.,	\$73 35	
12.67 linear feet curved curb @		
65 cts.,	8 23	
161.70 square yards concrete @		
34 cts.,	54 98	
Amts. carried forward,	\$136 56	\$1,354 01

Amts. brought forward,	\$136 56	\$1,354 01
Setting 173.67 linear feet curb @ 12 $\frac{45}{100}$ cts.,	21 63	
		158 19
Cr. by work charged to new concrete walks, 9 square yards concrete @ 34 cts.,	3 06	
		\$155 13
Less one-half paid by city,	77 57	
		77 56

Assessed upon abutters as follows:

M. E. Buck,	\$26 28
T. R. Rhodes,	24 82
Elizabeth E. Knox,	26 46
	\$77 56

West Foster Street, (Order No. 1356).

Total cost:

168.7 linear feet straight curb @ 45 cts.	\$75 92	
Setting 168.7 linear feet curb @ 11 $\frac{59}{100}$ cts.,	19 56	
180.3 square yards concrete @ 34 cts.,	61 30	
Labor removing trees,	3 33	
Repair catch-basin (labor and material),	10 12	
		\$170 23
Cr. by work charged to trimming and removal of trees,	\$3 33	
Cr. by work charged to new concrete walks and not assessable,	17 28	
Cr. by work charged to catch-basins and drains,	10 12	
		30 73
Amounts carried forward,	\$139 50	\$1,431 57

Amounts brought forward, . . .	\$139 50	\$1,431 57
Less one-half paid by city, . . .	69 75	
		69 75

Assessed upon abutters as follows:

Wm. Bogle estate,	\$69 75	
Total charged to abutters, . . .		\$1,501 32

RECAPITULATION.

Repair of present walks, appropriations		
and receipts,	\$1,463 44	
New individual walks, appropriations		
and receipts,	3,365 63	
To complete walks already begun, appro-		
priations and receipts,	800 00	
New continuous walks,	2,169 00	
		\$7,798 07

CONTRA.

Curbing,	\$2,263 08	
Concreting,	1,990 92	
Labor,	1,099 09	
Printing and advertising,	14 25	
Brick,	510 08	
Laying brick,	157 68	
Cement,	5 55	
Sand,	42 00	
Car fares,	2 75	
Teaming and stock from yard,	66 47	
		6,151 87
Unexpended balances,		\$1,646 20
Total expenditures,	\$6,151 87	
Total receipts,	\$1,329 07	
Assessments levied,	1,501 32	
		2,830 39
Net cost to the city,		\$3,321 48

STREET WATERING.

This work is done under the provision of Chapter 24 of the city ordinances. No appropriation is made; the treasurer is authorized to pay the bills in anticipation of the collection of the assessments. 1617 assessments were levied on the abutting estates, and certified to the assessors, the amount of assessments being as follows:

Vacant land,	\$ 283.78	
Occupied land,	3,624 67	
		\$3,908 44

Expended:

Robert Philpot, sprinkling,	\$ 104 62	
C. L. Hoffman, "	2,746 54	
Labor and inspection, pay rolls,	300 8c	
Repairs to watering carts,	199 24	
Repairs to stand pipes,	145 03	
Teams, highway division,	4 38	
Making schedules for assess- ment,	35 00	
Advertising and printing,	6 75	
Expressage,	15	
		3,542 51

Surplus of assessment over expense, in 1901, . \$ 365 93

Statement of Street Sprinkling Fund, February 1, 1902.

Amount of 1899 assessment (uncollected January 1, 1900)	\$1,552 97
Amount of assessment 1900,	3,925 92
Amount of assessment 1901,	3,908 44
	\$9,387 33

Expended:

Deficiency, January 1, 1900,	\$1,183 79	
Expended 1900,	4,334 60	
Expended 1901,	3,542 51	
		9,060 90
Surplus,		\$ 326 43

On April 5, 1901, the board of aldermen passed Order No. 1103, authorizing the following named streets sprinkled:

	Lin. ft.
Ashland st., from Melrose st. to Highland av.	1,241
Adams st., from Wyoming av. to Russell st.	827
Batchelder st., from Bellevue av. to Porter st.	869
Bellevue av., from Linden st. to Upham st.	2,442
Berwick st., from Foster st. to Wyoming av.	1,230
Botolph st., from Franklin st. to West Hill av.	373
Cottage st., from Foster st. to Wyoming av.	1,140
Emerson st., from Poplar st. to Orient ave.	4,773
Essex st., from Emerson st. to Main st.	1,897
Florence st., from Foster st. to Russell st.	2,132
Foster st., from Vinton st. to Larrabee st.	4,784
Franklin st., from Main st. to Stoneham line.	4,847
Green st., from Main st. to Porter and Lebanon sts.	2,834
Greenwood st., from Franklin st. to Woodland av.	1,147
Grove st., from Berwick st. to Sixth st.	4,697
Herbert st., from Berwick st. to Myrtle st.	379
Howard st., from Green st. to M. G. Cochrane's	1,244
Hurd st., from Cottage st. to B. & M. R. R.	776
Hillside av., from Bellevue av. to angle in street.	336
Highland av., from Sargent st. to Cliff st.	609
Lake av., from Emerson st. to Tremont st.	1,224
Lebanon st., from Porter st. to Beech av.	3,459
Lynde st., from Main st. to Summer st.	1,234
Laurel st., from Lebanon st. to Gooch st.	664
Main st., from Greenwood line to Malden line	11,994
Malvern st., from Potter street to Meridian st.	1,325
Meridian st., from Grove st. to Beech av.	737
Melrose st., from Vinton st. to Belmont st.	654
Melrose pl., from Melrose st.	284
Myrtle st., from Grove st. to Emerson st.	2,227
North av., from Walton pk. to Stoneham line.	693
Orris st., from Vinton st. to Walton pk.	1,090
Orient av., from Porter st. to Emerson st.	1,015
Pleasant st., from Wyoming av. to Ashmont st.	1,361
Rowe st., from Emerson st. to Upham st.	563
Tremont st., from Emerson st. to J. P. Deering's	566
Tremont st., from Franklin st. to Melrose st.	848
Trenton st., from Foster st. to Washington st.	2,560
Upham st., from Main st. to Sewall st.	2,511
Vinton st., from Franklin st. to Foster st.	4,880
Wyoming ave., from Stoneham line to East line G. T. Brown Est.	4,446
Walton pk., from Franklin st. to Orris st.	832
Warren st., from Franklin st. to Orris st.	614
Youle st., from Vinton st. to Leeds st.	892

During the year certain others were added as follows:

June 1st, Dell av., from Upham st. to Winter st.	362
July 3rd, Howard st., in front of No. 134	250

Total..... 85,862

Advertisements were inserted in the local papers asking for bids; six bids or proposals were received and opened April 22, 1901, which are given below.

CANVASS OF BIDS FOR SPRINKLING ABOUT 85,000 FEET OF
STREETS, OPENED APRIL 22, 1901.

C. L. Hoffman.....	\$32.75	per 1,000 ft. per season	\$2,783.75
Philip Keating.....	35.00	" " " " "	2,975.00
Norris & Co.	36.27	" " " " "	3,082.95
Robert Philpot.....	42.00	" " " " "	3,570.00
F. A. Pratt.....	44.70	" " " " "	3,799.50
J. Gibbons.....	46.80	" " " " "	3,986.50

The bid of C. L. Hoffman was accepted. He signed a contract and gave a bond of \$1,000 for its faithful performance. By the terms of this contract, the city paid for each 1,000 feet sprinkled during the months of

May.....	\$3.75	September	\$5.00
June	5.00	October	4.00
July	6.00	November.....	3.00
August.....	6.00	December	0.00
Total for 8 months		\$32.75	

Early in the season, numerous complaints were received that the work was not satisfactory. An inspector was employed to look after this and see that the provisions of the contract were complied with, after which few complaints were received and the work was more satisfactorily performed.

STREET LIGHTING.

The city is lighted by contract with the Malden Electric Light Company, which supplies 52 arc lamps of 2,000 candle power and 522 incandescent lamps of 25 candle power. These are burned each dark night from dusk until 12.15 o'clock a. m., and the arc lights are also burned from 5 o'clock a. m. until daylight during the months of November, December, January, and February, the price by contract being \$73.68 per year for arc lights and \$15.50 per year for incandescent lights.

This contract expired August 4th, 1901, and the lights were continued at the old schedule price until the end of the year, January 31, 1902. No new lights have been added during the year.

The Malden Electric Company has taken up the slack

in all of their wires and renewed all dangerous poles; some of the lines were entirely reconstructed, and are more satisfactory; still other lines need to and probably will be rebuilt the coming season.

Appropriation,	\$11,000 00
" order No. 1449,	1,025 00
	12,025 00
Expended:	
Paid for advertising,	\$10 58
" Malden Electric Company,	11,955 51
	11,966 09
Balance in treasury,	\$58 91

PARKS.

All of the small public grass plots within the city, including the grounds around City Hall, were fertilized and the grass kept cut.

New seats were placed on the edge of Ell Pond at Main street.

PARK MAINTENANCE.

Appropriation,	\$200 00
Receipts paid to treasurer,	1 00
	\$201 00
Expended :	
For labor and teams, A. W. Lynde,	\$78 78
" seats at Ell Pond, W. A. Goodno,	11 25
" zincing " " " Brock Bros.	11 36
" lumber, seats at Howard street, L.	
C. Hoyt,	4 42
" preparing and planting bed of tulips,	
C. Casey,	1 50
	113 16
Cash balance in treasury,	\$87 84

CITY HALL.

On July 9, 1901, the board of aldermen passed Order No. 1290, appropriating \$5,500.00 for repair of the outside of the City Hall building and for improvements in the auditorium; later this appropriation was increased by \$300.00.

The work was advertised, bids received and contracts made as follows: for slating, tinning and metal work \$233.00; scraping and pointing brick work \$240.00; two new balconies \$88.00 each; repair of wood-work on outside of building \$225.00; relaying floor of auditorium \$493.70 and for all additional floors 12 cents per square foot; for all plastering 40 cents per square yard; for all painting inside and out \$835.00; for decorating the city auditorium \$800.00; for electric wiring and fixtures \$650.00; for new seats in the auditorium \$1,537.50. Lewis A. Dow, architect, was employed to look after the work; a contract was made with William Morss for doing all work except wiring and fixtures and new seats; wiring was done and fixtures furnished by John A. Cameron & Co. of Gloucester and seats were purchased of Heywood Brothers and Wakefield Company, they agreeing to keep the same in repair for a term of ten years.

In addition to this work, arrangements were made later with Mr. Morss for changing the appearance of the stage by erecting two wooden columns on either side, connecting them by an elliptical arch, greatly improving the appearance of the auditorium.

In addition to repairs on the outside of the building and improvements of the city auditorium, still other repairs should be made, principal of which is the cementing of the basement, renovating of the plumbing and erection of shelves in the room over the auditorium for the storage of books, etc. The cost of this work would not be great, but the amount appropriated annually for the running expenses of the building has been so small that, notwithstanding the most rigid economy, it has been exceeded each year.

CITY HALL IMPROVEMENT.

Appropriation,	\$5,500 00
" (Order No. 1421.)	300 00

Expended:

John A. Cameron & Co., con- tract hall,	\$650 00	
John A. Cameron & Co., con- tract stage,	12 25	
John A. Cameron and Co., switch and plugs,	2 20	
John A. Cameron & Co., extra work,	97 96	
		\$762 41
Wm. Morsson architect estimate	\$768 60	
" " " " "	810 00	
" " " " "	1,424 10	
		3,002 70
Wm. Morss, extra work,	201 12	
L. A. Dow, architect,	168 73	
Brock Brothers, contract,	\$35 22	
" " " " "	2 34	
		37 56
Advertising,	12 38	
Typewriting contracts,	58 50	
		70 88
R. M. Gibson, painting new arch,	12 00	
		4,255 40
Balance in treasury,		\$1,544 60

The receipts for use of auditorium have been less than usual, which is due to the fact that it was undergoing repairs from the middle of August to the first of January. It has been engaged only twenty-seven times, for eight of which no charge was made.

LIST OF ENGAGEMENTS.

Rehearsals,	4,	\$40 00
Payment of expense,	1,	11 17
Afternoon,	2,	10 00
Full charge;	12,	240 00
Free,	8,	
Totals,	27	\$301 17

STATEMENT OF COLLECTIONS.

DR.

To rent of city auditorium,	\$301 17
" sale of old seats,	100 45
" sale of plans by Larrabee & Stearns,	2 25
	\$403 87

CR.

By cash paid treasurer, rent of auditorium	\$256 17
" " " " sale of old seats, .	76 75
" am't uncollected, rent of auditorium,	45 00
" " " " sale of old seats, .	23 70
" " paid treasurer, sale of plans, .	2 25
	403 87

JANITOR SERVICE.

Appropriation,	\$750 00
Expended:	
C. J. Wing, 12 months' salary,	\$720 00
Labor moving seats,	5 28
	725 28
Balance in treasury,	\$24 72

HEATING.

Appropriation,	\$275 00
Expended:	
C. B. & F. H. Goss, for coal,	44 50
S. E. Benson & Co., " "	230 00
	274 50
Balance in treasury,	\$ 50

LIGHTING.

Appropriation,		\$775 00	
Expended:			
Malden & Melrose Gas Light Co.	\$489 12		
Malden Electric Co.	360 89		
	850 01		
Deficiency,		75 01	
	\$850 01	\$850 01	
Bills in hand of auditor, unpaid.			
Malden Electric Co.	\$ 68		
" " "	97 10		
	97 78		
Balance in treasury,	22 77		
		\$75 01	

CITY HALL CONTINGENT.

Appropriation,		\$300 00	
Expended:			
Repairs, Wm. Morss,	\$195 12		
" W. A. Goodno,	20 75		
" H. G. Perry,	8 55		
" C. H. Cummings,	3 25		
" Flag and ropes,	5 69		
" Brock Bros.,	12 73		
Brushes, Jordan & Christie,	4 17		
Electric lamps,	1 60		
Filling vase, C. Casey	20 00		
Hose, Perrin, Seamans & Co.,	10 00		
Moving piano off and on stage,	12 00		
Repairs to sewer drainage,	3 13		
Expressage,	60		
Sundries, C. J. Wing,	9 00		
Deficiency,		6 59	
	\$306 59	\$306 59	

Bills in hands of auditor, unpaid.

Brock Bros.	\$2 17
" "	50
Eastman's Express,	4 00
	6 67
Balance in treasury,	0 08
	\$6 59

STREET BOUNDS.

The county commissioners were petitioned to relocate or define the lines of certain county ways within the city, and consequently new bounds had to be set. An appropriation of \$350.00 was made for this purpose, as the commissioners claimed that this expense would have to be borne by the city. The bounds set were divided as follows:

On Green street,	36
On Howard street,	9
On Lebanon street,	79
	124

In addition to these the city set the following:

On Upham street,	2
On Botolph street,	2
On West Linden, street,	2
	6

Total,	130
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Appropriation,	\$350 00
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Expended:

Granite posts, F. E. Newhall,	\$110 00
Labor as per pay rolls,	122 98
Lead, G. M. Taylor,	1 05
Concrete, C. L. Hoffman,	1 73
	235 76
Balance in treasury,	\$114 24

ENGINEERING DIVISION.

Few people realize the amount of work done in this division of the public works department, and seem to think it is an additional expense to the city. This is not entirely so, for a good part of the work done by the assistant engineers has always been done. The only difference is that at present it is performed by engineers, whereas in the past, work was laid out by foremen with the assistance of laborers, using for tools a piece of twine and a spirit level, and no doubt cost more and was not as satisfactory. Further than this no regard was paid to future needs, consequently the work often had to be done over, altered or changed. The following is a summary of the work done:

FOR HIGHWAY DIVISION.

Street Lines and Grades for Construction.

	Lin. ft.
Beech av., from Lebanon st. to Fairmount st.....	600
Botolph st., from West Hill av. to York terrace.....	200
Essex st., from Emerson st. to angle.....	800
Franklin st., from Hose No. 3	75
Lake av., from Emerson st. to Tremont st	1,180
Laurel st., from Lebanon st. East.....	900
Park st., from Lebanon st. to Spear st.....	1,300
Tremont st., from Emerson st. north.....	1,100
Washington st., from Lynde av. southerly.....	2,200
West Hill av., from Botolph st. north.....	400
West Emerson st., from No. 286 to Metropolitan park.....	1,100
Cutter st., from Sanford st. to Baxter st	250
Howard st., from Elm st. to culvert.....	1,100
Dell av., from Foster st. north.....	150
Total.....	11,355

FOR SEWER DIVISION.

Streets Sewered, Lines and Grades Given, Quantities Computed,
Estimates Rendered, Plans and Profiles Made.

	Lin. ft.		Lin. ft.
Boardman avenue.....	902	Heywood avenue.....	507
Damon avenue.....	272	Howie court.....	644
Frost avenue.....	494	Right of way.....	649
Hawes avenue.....	518	Richardson road.....	193
Henry avenue.....	659	Pearl street.....	951
Hesseltine avenue.....	300		
		Total.....	6,089

FOR WATER DIVISION.

Drawings and Blue Prints of Special Castings, Lengths Scheduled by
Streets, Lines for Construction spiked out.

Ashland street	Gooch street	Main street
Albion "	Hancock "	Mountain avenue
Avon "	Howie court	Pratt street
Boardman avenue	Howard street	Rowe "
Cliff street	Holbrook court	Sargent "
Eastman place	Laurel street	Stevens place
Farwell avenue	Lebanon "	Short street
Fletcher street	Linden place	Sixth "
Franklin "	Larrabee street	West Linden street
Green "		

FOR SIDEWALKS.

1. CURBING.—Plans and Profiles Made, Lengths and Radii Computed,
Lines and Grades Given, Work Inspected and Measured.

LOCATION.	Linear Feet.		Description.
	Straight.	Curved.	
Beech av., corners of Fairmount, Irving, Harvard and Lebanon sts.....	88.00	73.25	Highway Div.
Berwick st. bet. Grove and Wyoming av.	200.00	6.33	“ “
Botolph st. at Susan A. Gwynne's.....	192.31	14.45	Individual
at N. W. cor. W. Hill av.	19.15	9.65	Hi. Div. & C.B.
at S. W. cor. York terrace .....	.....	9.90	Highway Div.
Cass st. at Nos. 3-19	269.06	7.79	Individual
Crescent av. at No. 87.....	50.00	.....	“
Dell av. at Nos. 68-80	80.90	9.52	“
Emerson st. Nos. 219, 223 and 234	363.75	12.61	“
Farwell av. No. 20	96.67	9.61	“
Ferdinand st., No. 46	51.32	93.30	“
Florence st. at Gooch school	153.60	37.95	“
Foster st. from Berwick to No. 52	168.70	.....	Continuous
at Berwick st. crossing	20.00	15.69	Highland av.
East at No. 203	62.00	.....	Individual
East at No. 185 to 203	163.00	12.67	Continuous
Franklin st. from Main st. to Howie ct. .	168.83	50.94	“
at C. M. Cox's .....	.....	71.00	Individual
at hose house No. 3.....	18.08	9.42	Highway Div.
Green st., corners of Linden st.	24.00	40.40	“ “
N. E. cor. of Main st.	47.81	3.83	Individual
Harvard st. at No. 35	37.00	6.33	“
Highland av., W. corners Ashland st....	24.00	20.95	Highway Div.
Hillside ave. at No. 64	63.25	.....	Individual
Laurel st., No. 50-68	248.00	.....	“
Lebanon st., Nos. 480-486	66.00	.....	“
at Nos. 513-529	65.98	.....	Continuous
Linden st. at No. 81.....	60.00	.....	Individual
West from Green to Main	29.17	.....	Highway Div.
West from Green to Main	442.16	29.76	Continuous
Main st. at No. 384	52.00	.....	Individual
S. W. cor. of Franklin.....	12.00	32.55	Highway Div.
Malvern st. W. from Meridian.....	96.42	6.33	Individual
Maple st. at Gooch st.	126.37	.....	“
Myrtle st. at Nos. 116-118	49.12	6.33	“
Rowe st. at No. 132... ..	36.69	19.25	“
from No. 22 to No. 32.....	74.85	.....	Continuous
Upham st. No. 41-51½.....	167.37	17.14	Individual
No. 131	111.55	6.40	“
S. W. cor. Dell av.	25.58	13.00	Hi. Div. & C.B.
Washington st. Lynde and Lebanon sts..	304.82	91.96	Continuous
Wyoming av., B & M. R. R. crossing ..	225.10	56.25	Individual
West Emerson st. W. from Lake av.	362.90	.....	Repairs
Totals	4,917.52	775.56	.....

2. CONCRETE.—(Under contract with C. L. Hoffman.) Laid Out,
Measured and Estimates Rendered.

	QUANTITIES IN SQ. YDS			Totals.
	Repairs.	New work	Top Dressing.	
For Highway Division.....	88.99	.....	.....	88.99
" " Sewer "	30.05	.....	.....	30.05
" " Water " .....	.....	.....	4.16	4.16
" " Surface Drainage	21.90	.....	.....	21.90
" " Catch Basins and Drains..	2.00	.....	.....	2.00
" " Stone Bounds.....	5.10	.....	.....	5.10
" " Sidewalks	2,156.63	1,746.84	2,547.91	6,451.38
Totals.....	2,304.67	1,746.84	2,552.07	6,603.58
For Sidewalk Division, (Laid by R. Philpot).....	.....	91.50	.....	91.50
On Tremont street, west side, (on account of Met. sewer) ..	.....	.....	.....	480.70
Totals. ....	.....	.....	.....	7,175.78

3. BRICK WALKS.—Line and grade given. Data furnished.

	Sq. Yds.
Myrtle street at No. 116 and 118,	50.5
Maple street at Gooch school,	83.0
Florence street at Gooch school,	139.5
Main street, Franklin street, to Highland avenue, .	628.2
	901.2

(Brickwork laid by contract with Eugene McCarty.)

FOR PUBLIC SERVICE CORPORATIONS.

Lines or grades given. Data furnished.

Beech avenue, for the poles of the Malden Electric Light
Co.

Cass street, for the N. E. T. & T. Co.

" " " " Malden Electric Light Co.

Farwell Avenue, for the N. E. T. & T. Co., and Malden
Electric Light Co.

Foster street, West, for the N. E. T. & T. Co.

Franklin street, for the B. & N. Street Railway Co.

" " " " Malden Electric Light Co.

Green street, for the " " " " and B. &
N. Street Railway Co.

Grove street, for the Malden Electric Light Co.

Green " " " tracks B. & N. Street Railway Co.

Linden " " " Malden Electric Light Co.

Main " " " " " "

" " " " B. & N. Street Railway Co.

Park " " " Malden Electric Light Co.

Rowe " " " " " " "

FOR CEMETERY DEPARTMENT.

46 lots surveyed, plotted, figured, traced and blue-printed.

52 additional lots designed and laid out.

450 linear feet of drives staked out.

3185 linear feet of water pipe located and plotted.

NOTE:—According to the new rules of the cemetery department and the city ordinances, this office has to prepare an accurate plan of every lot transferred, on a scale of 1 inch 4 feet and furnish two blue prints of same. This entails a large amount of extra work.

FOR ASSESSING DEPARTMENT.

Street Watering Assessments.

Number of separate lots computed,	.	.	.	1,617
" " streets scheduled,	.	.	.	45
Linear feet of highway sprinkled,	.	.	.	85,862
" " " frontages vacant,	.	.	.	27,579
" " " occupied,	.	.	.	121,601
" " " abated,	.	.	.	685

FOR OFFICE RECORDS.

I. Streets Cross-sectioned for Record Grade Plans.

	Lin. ft.
Berwick street, from Foster street, south,	400
Botolph street, from York terrace to Summit avenue,	600
Beech avenue, from Lebanon street to Meridian street	1,086
Church street, from Forest street to Mountain avenue	200
Crescent avenue, from Frances street to Everett street,	390
Cutter street, from Sanford street to Baxter street,	300
Essex street, from Myrtle street to Emerson street,	1,300
Emerson street, from Vinton street to poplar street,	800
East Foster street, from Gooch to Larrabee street,	700
Florence street, from Maple street, south,	500
“ “ from Wyoming avenue, north,	666
Haskell street, from Farwell to Howard street,	260
Harvard street, from Beech street to Appleton street,	610
Hillside avenue, from Emerson street to angle,	570
Lynde street, from Linwood ave. to Lebanon street,	900
Lebanon street, from Upham street to First street,	450
Laurel street, from Lebanon street to Larrabee street	1,500
Lake avenue, from Tremont street to Emerson street,	1,176
Maple street, from Florence street, west,	300
Melrose street, east and west from Ashland street,	700
Main street, from Grove street to Foster street,	700
Park street, from Lebanon street to Spear street,	1,300
Rowe street, from Green street to Porter street,	650
Sargent street, from Franklin street to Highland ave.,	550
Sylvan street, from Main street to Lebanon street,	2,900
Tremont street, from Emerson street to second angle,	1,300
Upham street, from Dell avenue to Lebanon street,	500
Vinton street, from Cedar Park, north,	400
Washington street, from Lynde ave. to Trenton st.,	400
West Hill avenue, from Botolph street, north,	800
West Foster street, from B. & M. R. R. to Myrtle st.,	600
Wyoming avenue, from Pleasant street to B. & M. R. R.,	200
Total,	23,708

2. STREET LINES SURVEYED FOR RECORD.

	Lin. ft.
Berwick street, from Foster street, south, . . .	400
Botolph street, from west end,	600
Baxter street, from Whittier street to Cutter street,	250
Cutter street, from Sanford street to Baxter street,	300
Dell avenue, from Upham street to Brook, . . .	900
Faxon street, from Grove street to Malvern street.,	388
Franklin street, southwest and northwest corners of Main street,	200
Lake avenue, from Tremont street to Emerson street,	1,176
Linden street, from Elm street to Green street, .	850
Lynde street, from Linwood avenue to Lebanon st.,	900
Maple street, from Florence street, west, . . .	550
Main street, from Franklin street to Ell Pond, .	2,400
Malvern street, from Lebanon street to Meridian st.,	1,100
Rowe street, from Green street to Porter street, .	650
Upham street, from Dell avenue to Lebanon street,	500
West Foster street, from Main street to Cottage st.,	1,100
Willow street to Essex street,	605
Total,	12,869

FOR ABUTTERS.

Street Lines and Grade given

		Linear feet.
Cherry street,	For grading lawns,	350
Essex "	" new building,	150
Fletcher "	" setting stone bounds,	80
Fletcher "	" " batter boards,	80
Ferdinand "	" retaining walls,	50
Harvard "	" grading lawns,	50
Main "	" line and grade for building .	200
Main "	" grading private walks,	100
Melrose "	" building walks and drives,	100
Mt. Vernon "	" building retaining wall,	260
Laurel "	" setting batter boards,	75
Pleasant "	" fence line,	210

Upham street,	For grading lawns,	120
Vinton " "	" " " "	75
Willow " "	" " " "	240
W. Foster " "	" " " "	265
Wyoming avenue,	" fence line,	100
York terrace,	" setting batter boards,	75
Total,		2,580

FOR STREET NUMBERING.

New plans made on tough bond paper, size 28 in. by 12 in. to scale of 40 of the following streets:

Ashburton place,	Malvern street,
Burrell street,	Natalie avenue,
Berwick street,	Orris place,
Farwell avenue,	Pine street,
Franklin terrace,	Reading Hill avenue,
Ferdinand street,	Sibley street,
Forrest street,	Spear street,
Fletcher street,	South avenue,
Fairview avenue,	Upland road,
Holland road,	W. Emerson st. (Charles st. W.)
Hopkins st., Howie court,	Youle street,
Howie court,	York terrace,
Keating place,	Franklin street,
Malvern street,	Pleasant street.

Doors numbered,	57
Figures put on,	138
Letters " " " " " "	1

SPECIAL SURVEYS AND STUDIES.

1. *On Surface Drainage.*

Surveys, computations and taking plans for right of way for drains between Forrest street and Mountain avenue. Right of way for conduit between Lebanon street and Ell Pond brook. Levels and grades on flooded area at Cutter and Sanford streets.

2. *On Wyoming Cemetery.*

Location of pond line and trees to fix new drive.

Working drawings of proposed soldiers' monument.

3. *On Highways.*

For widening, straightening and regrading of Sylvan street.

Park street, retaining wall.

STATEMENT OF RECEIPTS AND EXPENDITURES.

Supplies and Incidentals.

Appropriation,	\$200 00
Cash receipts paid treasurer,	1 05
Transferred from engineer's salaries per Order No. 1461,	90 77
	\$291 92

Expended:

Barry, Beale & Co., pens,	\$ 75
Boston Blue Print Co., blue prints and paper,	16 81
Barger, C. L., repairs to instruments,	4 20
Bliss, Geo. E., repairs to instruments,	9 14
Coyle, F. E., spikes,	3 35
Dow, Lewis A., blue print paper,	3 42
Expressage,	4 00
Hutchinson, C. C., repair tripod,	3 25
Hunt, W. F., car fares and sundries,	43 44
Libby, L. L., grade stakes,	28 88
Ledder, G. G., blue print paper,	3 65
Morss, Wm., repairs to drawers,	3 50
Mantelle, A. E., carbon letter book,	2 00
Perry, H. J., spikes,	5 71
Smith Bros., repairs to tapes and mak- ing range poles,	12 25
Tyzzar, F. H., painting poles,	1 00
Advertising,	38
Wadsworth, Howland, mounted paper, blue print paper, tracing paper and supplies,	87 36
	233 09
Balance in treasury,	\$58 73

Salaries.

Appropriation,	\$2.800 00
Expended:	
W. F. Hunt, 287¼ days,	\$861 75
A. J. Waghorne, 276 days,	828 00
C. F. Woodward, 274½ days,	686 23
Geo. Maguire, 56 days,	140 00
John Rink, 78 days,	78 00
R. F. Luce, 19 days,	19 00
W. W. Albee, 86¾ days,	86 75
Amount transferred to engineer's sup- plies, (No. 1461),	90 77
	2,790 50
Balance in treasury,	\$9 50

CLASSIFIED DIVISION OF THE TIME OF THE ENGINEERING
OFFICE REDUCED TO MONEY.

Highway construction, lines and grades,	\$136 50
Sidewalks, curbing and concrete,	305 53
Water supply, plans and records,	191 97
Sewerage, construction and assessment,	294 91
Surface drainage, construction,	287 90
Abutters,	26 90
Public service corporations,	32 50
Wyoming Cemetery, surveys, computation, plans,	109 74
City Hall, measurements, levels, plans,	86 14
Permanent office records, street line surveys, bench levelling,	145 50
Street numbering, field and office work,	55 69
Street line plans and computations,	18 14
Record grade plans, cross sectioning, computations	493 67
Plotting, estimates and computations,	171 64
Deeds, records, indexing and general office work,	552 71
Tracings of all kinds,	83 73
Special studies, estimates and plans,	14 46
	\$3,007 71

MISCELLANEOUS WORK.

In addition to work for which specific appropriations were made, other matters of minor importance have been attended to and charged to the contingent fund, as per the following statement:

Horse and buggy, Mayor's use,		\$1 50
Rent polling places, M. F. Eastman,	\$53 00	
" " " Wyoming Lodge F.		
& A. M.	30 00	
		83 00
Preparing polling places, W. A. Goodno,	48 90	
" " " C. J. Wing,	31 40	
" " " Team hire,		
Eastman's Express,	1 00	
Preparing polling places, oil, Frost &		
Hawes,	66	
Preparing polling places, wood, C. B. &		
F. H. Goss,	75	
Preparing polling places, lighting, Mal-		
den Electric Co.,	2 40	
		85 11
Telephone service, N. E. Tel. & Tel. Co.,		118 71
Repair of gas pipe in W. L. Pierce's		
office,		1 65
Repair of drinking fountain, Brock Bros.,		2 35
Ice for " " and City Hall,		
Altamont Co.,		60 00
Decorating hall, Sept. 19, labor on pay		
roll,	\$14 69	
O. E. Drowne, stage,	6 00	
Eastman's Ex. moving settees,	20 00	
		40 69
House numbering, Allen Bros.,	\$7 32	
Melrose Free Press, advertising,	2 50	
S. G. Potter, notices,	1 50	
		11 32
Amount carried forward,		\$404 33

Amount brought forward,	\$404 33
Recording deeds,	1 40
Mounting ward line maps,	10 00
Wadsworth, Howland & Co.,	5 00
Total,	\$420 73

In conclusion I wish to thank you for your great kindness, and to express appreciation to the Board of Aldermen for their consideration and many courtesies extended me, and to acknowledge my indebtedness to the employees of the department for their co-operation.

Respectfully submitted,

W. DABNEY HUNTER,
Engineer and Superintendent of Public Works.

Melrose, Mass., Feb. 1, 1902.

Report of City Treasurer

FOR FINANCIAL YEAR ENDING JANUARY 31, 1902.

Cash in treasury, Feb. 1,		
1901,	\$2,468	41
Total receipts for year, \$511,463 71		
	36,521	65
	<u>547,935</u>	36
		\$550,453 77
Total disbursements for		
year,	\$505,093	16
	36,521	65
	<u>541,614</u>	81
Balance, cash in treas-		
ury, Jan. 31, 1902, .	8,838	96
	<u>550,453</u>	77

CEMETERY TRUST FUNDS.

Amount to credit of account, Feb. 1,		
1901,	\$6,462	50
Received during year, as follows:		
Hiram Cobb,	\$50	00
Osmore Jenkins,	100	00
Ellen R. Shapleigh,	100	00
Helen E. Backer,	150	00
William A. Orcutt,	100	00
Sarah H. Hunt,	100	00
Juliana M. Woods,	100	00
Calvin N. Chapin,	165	00
William F. R. Bowers,	100	00
	<u>965</u>	00
Amount to credit of account, Jan.		
31, 1902,	\$7,427	50

E. TOOTHAKER FUND.

Amount to credit of account, Feb.

I, 1901, \$1,582 11

Received during year, as follows:

City of Melrose, interest Jan. 1, 1900

to Jan. 31, 1902, 123 16

\$1,705 27

Payments during year, 285 35

\$1,419 92SPECIAL FUND FOR CELEBRATION OF 100TH ANNIVERSARY
OF TOWN OF MELROSE, MAY 3RD, 1950.

Balance remaining from celebration of July 4th, 1876, "Centennial Fourth," was placed in the Melrose Savings Bank by the committee, to credit of town treasurer, to remain until May 3rd, 1950, then with accumulations to be expended for celebrating the 100th anniversary of the Town of Melrose.

Original sum deposited, \$7 50

Accumulations to Jan. 1, 1902, 12 55

\$20 05

W. R. LAVENDER, City Treasurer,

In account with CITY OF MELROSE.

DR.

Cash in treasury, Feb. 1, 1901, \$2,468 41

Receipts for year as follows:

J. W. Murray, collector, taxes, 1895, \$ 6 84

" " " " " 1896, 22 13

" " " " " 1897, 25 57

" " " " " 1898, 172 12

" " " " " 1899, 2,166 13

" " " " " 1900, 95,074 39

" " " " " 1901, 139,353 50

\$236,820 68

Amount carried forward, 239,289 09

Amount brought forward,	\$239,289 09	
✓ J. W. Murray, collector, sewer assessments,		10,808 52
✓ J. W. Murray, collector, street sprinkling, 1899,	\$ 51 39	
✓ J. W. Murray, collector, street sprinkling, 1900,	1,545 32	
✓ J. W. Murray, collector, street sprinkling, 1901,	1,944 50	
		3,541 21
J. W. Murray, collector, redemption of tax titles, takings of 1899,	\$1,365 53	
J. W. Murray, collector, redemption of tax titles, takings of 1900,	196 38	
		1,561 91
J. W. Murray, collector, water rates, 1900,	\$751 85	
J. W. Murray, collector, water rates, 1901,	41,313 04	
J. W. Murray, collector, water rates, 1902,	6,608 00	
J. W. Murray, collector, summons, water rates,	65 00	
Commonwealth of Mass., water entrance fees outside of district,	400 96	
		49,138 85
Commonwealth of Mass., state aid,	\$2,676 00	
" " " soldiers' burial,	105 00	
Commonwealth of Mass., military aid,	246 71	
Commonwealth of Mass., soldiers' relief,	98 00	
		3,125 71
Cemetery,		5,011 07
Cemetery trust funds,		965 00
Amount carried forward,	\$313,441 36	

Amount brought forward,		\$313,441 36
Charity department, aid of poor, account of 1901,	\$2,706 75	
Charity department, aid of poor, deficiencies of 1900,	627 12	
		3,333 87
City clerk's contingent, remainder of fees are credited to treasury,		425 00
Engineering division, supplies and incidentals,		1 05
Health department, fumigation and disinfection,	\$50 00	
Health department, contingent	41 50	
		91 50
Highway division, general repairs and maintenance,	\$3,277 12	
Highway division, bridges and culverts,	127 56	
		3,404 68
Inspector of milk and vinegar contingent, remainder of fees are credited to treasury,		25 00
Interest,		6,444 14
Municipal loans,		15,000 00
Parks,		1 00
Permanent loans,		29,000 00
Public library, dog tax,		1,033 60
Reduction of debt, Commonwealth of Massachusetts:		
Corporation tax,	\$7,719 75	
National bank tax,	2,590 16	
Street railway tax,	1,791 36	
		12,101 27
School department, printing,	\$ 11 60	
" " contingent,	1,932 11	
		1,943 71
Amount carried forward,		\$386,246 18

Amount brought forward,		\$386,246 18
Sewer department, construction, . . .	\$4,599 24	
“ “ private sewers,	2,919 60	
		7,518 84
Sidewalks, individual walks,	\$1,165 63	
“ repairs present walks,	163 44	
		1,329 07
State aid,		19 00
Surface drainage,		329 49
Temporary loans,		144,121 65
Toothaker, E., fund,		123 16
Treasury,		1,338 67
Water division, maintenance,	\$5,871 54	
“ “ construction,	67 93	
“ “ relaying pipe,	3,488 24	
		9,427 71
		\$550,453 77

CR.

Payments for year as follows:

Assessors, transfers,	\$50 00
“ printing poll books,	200 00
“ 7 street books,	14 00
“ collector's warrants, cash and street watering books,	20 00
Assessors, carriage hire,	75 00
“ Maine stocks,	8 00
“ contingent,	224 83
Bonds for city officers,	233 00
Cemetery,	4,989 33
Charity department, aid of poor,	11,419 23
“ “ furniture, sta- tionery,	119 40
Charity department, clerical as- sistance,	156 00
City hall, janitor,	725 28

Amounts carried forward, . . . \$18,234 07 \$550,453 77

Amounts brought forward,	\$18,234 07	\$550,453 77
City hall, heating,	274 50	
" " lighting	752 23	
" " contingent,	299 92	
City hall improvement,	4,255 40	
Claims,	832 50	
Contingent, general,	3,078 60	
" aldermanic,	205 76	
" city clerk's,	423 99	
" collector's,	930 00	
" inspector of buildings,	2 75	
" inspector of milk and vinegar,	22 00	
County tax,	13,388 55	
Ell Pond park,	2,147 82	
Engineering division, salaries,	2,699 73	
" " supplies and incidentals,	233 09	
Fire department:		
4 permanent drivers,	3,120 00	
1 electrician and driver,	876 00	
1 engineer for steamer,	300 00	
55 call men,	2,429 19	
1 chief engineer,	150 00	
2 assistant engineers,	225 00	
1 house steward,	40 00	
Hay, straw and oats,	668 56	
Coal and wood,	328 50	
Horse shoeing,	154 63	
Expressing,	13 74	
Laundry,	40 96	
Fire alarm,	589 75	
Horse hire,	178 00	
New hose,	508 50	
Telephone, gas and electric light,	158 12	
Contingent,	458 65	
Fourth of July celebration,	350 00	
Amounts carried forward,	\$58,370 51	\$550,453 77

Amounts brought forward,	\$58,370 51	\$550,453 77
Health department:		
Collecting ashes,	381 50	
Removal of garbage,	1,200 00	
Fumigation and disinfection,	229 00	
Salary plumbing inspector,	650 00	
Contingent,	1,057 27	
Highway division:		
Trimming, care, etc., trees,	67 70	
Catch basins and drains,	2,000 00	
Bridges and culverts,	1,043 88	
Paving gutters,	500 00	
Removing snow and sanding streets,	1,500 00	
Cleaning crossings,	1,000 00	
General repairs and maintenance,	21,651 36	
Insurance,	1,632 48	
Interest,	30,501 93	
Melrose hospital,	1,000 00	
Memorial day,	200 00	
Military aid,	630 46	
Parks,	113 16	
Park street, paving gutters,	500 00	
Permanent loans,	20,000 00	
Police department:		
Salaries chief and regular officers,	10,343 74	
Salaries special officers,	736 76	
Nightwatchman,	382 50	
Contingent,	435 64	
Printing town report of 1899,	212 00	
Public library:		
Rent and heating,	1,200 00	
Salaries, new books, etc.,	2,819 75	
Public works office:		
Clerk and stenographer,	490 50	
Printing, books, etc.,	299 58	
Telephone,	66 67	
Amounts carried forward,	\$161,216 39	\$550,453 77

Amounts brought forward,	\$161,216 39	\$550,453 77
Reduction of debt,	769 54	
Refunded taxes,	20 51	

Salaries:

Assessors,	825 00	
Assessors' clerk,	850 00	
Agent state and military aid,	100 00	
Board of health,	300 00	
" " overseers of poor,	395 84	
" " registrars of voters,	200 00	
City auditor,	500 00	
City clerk,	1,200 00	
City clerk, clerical assistant,	750 00	
" collector,	1,000 00	
" solicitor,	500 00	
" treasurer,	750 00	
Engineer and superintendent public works,	2,250 00	
Inspector of buildings,	500 00	
" " animals and food products,	64 14	
Inspector of milk and vinegar,	100 00	
Mayor,	500 00	
" clerical assistant,	100 00	
Sealer of weights and measures,	216 66	

School department:

Teaching and supervision,	55,380 35	
Janitors' work,	6,004 00	
Books and supplies,	5,799 26	
Fuel,	7,449 89	
Repairs,	3,700 00	
Furniture,	599 71	
Transportation of pupils,	480 00	
Printing,	282 55	
High school and teachers' library,	99 76	
Contingent,	1,478 62	

Amounts carried forward, \$254,382 22 \$550,453 77

Amounts brought forward,	\$254,382 22	\$550,453 77
Sinking Fund Commissioners:		
Sewer loan sinking fund,	36,521 65	
School house loan "	5,000 00	
Water loan fund,	5,958 12	
Sewer Division:		
Private sewers,	2,838 94	
Construction,	13,890 25	
Labor (maintenance),	390 68	
Half rent of yard,	175 00	
Contingent,	96 85	
Sewerage tax,	9,727 23	27,118.95
Sidewalks:		
Repairs present walks,	1,356 78	
New individual walks,	2,715 75	
Continuous to complete, etc.,	653 79	
New continuous,	1,425 55	
Soldiers' burial,	210 00	
Soldiers' relief,	2,050 63	
State aid,	2,597 00	
State tax,	7,437 50	
Stone bounds,	235 76	
Street lights,	11,966 09	
Street sprinkling,	3,542 51	
Surface drainage,	11,204 37	
Tax titles,	5,367 90	
Temporary loans,	105,600 00	
Toothaker, E., fund,	285 35	
Water department,	21,696 32	
Water Division:		
Construction,	3,590 15	
Maintenance,	16,316 86	
Relaying pipe,	14,381 56	
	\$541,614 81	
Cash on hand Jan. 31, 1902,	8,838 96	
		\$550,453 77 \$550,453 77

STATEMENT OF CITY DEBT.

<i>Cemetery Trust Funds,</i>	\$7,427 50	\$7,427 50
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BONDS.

School House Loan Bonds,

Series of 1896, due Feb. 24, 1916,	\$200,000 00	
		\$200,000 00

Sewer Loan Bonds,

Series of 1894, due June 1, 1924,	\$100,000 00	
" " 1895, " June 1, 1925,	100,000 00	
" " 1896, " July 1, 1926,	50,000 00	
" " 1897, " June 1, 1907,	25,000 00	
" " 1897, " June 1, 1912,	25,000 00	
" " 1897, " June 1, 1917,	50,000 00	
		\$350,000 00

Town Hall Bonds,

Series of 1892, due Sept. 1, 1912,	45,000 00	
		\$45,000 00

Water Bonds,

Series of 1885, due Nov. 1, 1905,	\$37,000 00	
" " 1897, " May 1, 1907,	50,000 00	
" " 1892, " May 1, 1912,	25,000 00	
" " 1892, " Sept. 1, 1912,	37,000 00	
" " 1893, " Oct. 1, 1913,	50,000 00	
" " 1895, " July 1, 1925,	38,000 00	
		\$237,000 00

Permanent Loans,

On account Central fire station, coupon note, due Aug. 1, 1902,	\$10,000 00	
Amounts carried forward,	\$10,000 00	\$839,427 50

Amounts brought forward,	\$10,000 00	\$839,427 50
On account Central fire station, and grading school grounds, note due January, 1905, acc't C. F. Station, \$10,000 00 " sch. grounds, 9,000 00		19,000 00
On account land adjoining old cemetery and Upham street, note due April 22, 1903,		10,000 00
On account stone crusher, note due Jan. 6, 1903,		8,000 00
Park Loan, coupon notes, due May 15, 1902, \$1,000 00 " " " 1903, 1,000 00 " " " 1904, 1,000 00 " " " 1905, 1,000 00 " " " 1906, 1,000 00 " " " 1907, 1,000 00 " " " 1908, 1,000 00 " " " 1909, 6,000 00		13,000 00
City Drainage Loan, 1st series, due Oct, 30, 1902, \$2,000 00 " " " 1903, 2,000 00 " " " 1904, 2,000 00 " " " 1905, 2,000 00 " " " 1906, 2,000 00		10,000 00
		70,000 00
		\$909,427 50

Temporary Loans.

Trustees public library, demand note at $3\frac{1}{2}\%$	\$2,000 00
Melissa A. Todd, demand note at $3\frac{1}{2}\%$	5,000 00
Amount carried forward,	\$7,000 00

Amount brought forward, . . .	\$7,000 00
Sinking fund commissioners, demand note at $3\frac{1}{2}\%$. . .	2,000 00
Sinking fund commissioners, demand note at $3\frac{1}{2}\%$. . .	3,000 00
Sinking fund commissioners, demand note at $3\frac{1}{2}\%$. . .	36,521 65
Melrose Savings Bank, demand note at $3\frac{1}{2}\%$. . .	5,000 00
Harriet A. Austin, note due May 22, 1902, . . .	7,000 00
Andrew J. Bodge, note due May 28, 1902, . . .	2,000 00
Rogers, Newman & Tolman, note due Feb, 22, 1902, . . .	15,000 00
Stephen D. White, note due July 24, 1902, . . .	2,000 00
Annie M. Selee, note due May 28, 1902, . . .	2,600 00
Rogers, Newman & Tolman, note due March 25, 1902, . . .	10,000 00
Rogers, Newman & Tolman, note due, March 25, 1902, . . .	10,000 00
Elizabeth T. Baker, note due August 27, 1902, . . .	1,000 00
	————— \$103,121 65

Municipal Loans.

Rogers, Newman & Tolman, note due Nov. 2, 1902, . . .	\$5,000 00
Rogers, Newman & Tolman, note due Nov. 2, 1902, . . .	500 00
Rogers, Newman & Tolman, note due Nov. 2, 1902, . . .	5,500 00
Rogers, Newman & Tolman, note due Nov. 2, 1902, . . .	2,000 00
Rogers, Newman & Tolman, note due Nov. 2, 1902, . . .	2,000 00
	————— 15,000 00

Debt Statement, Showing Amounts Due Each Year.

Debt.	Water Bonds.					Sewer Bonds.		School House Bonds.	Central Fire Station and School House Note	Central Fire Station, Coupon Note.	Park Loan, Coupon Notes.	Land, Main and Upland Streets, Note.	Stone Crusher, Note.	Surface Drain, Loan Notes.	Total.
	May.	July.	Sept.	Oct.	Nov.	Sept.	June.	July.							
Month.									Jan.	Aug.	May.	April.	Jan.	Oct.	
1902.										\$10,000	\$1,000	.....	.....	\$2,000	\$13,000
1903.											1,000	\$10,000	\$8,000	2,000	21,000
1904.											1,000	.....	.....	2,000	3,000
1905.					\$37,000	.....	.....	.....	\$19,000	.....	1,000	.....	.....	2,000	59,000
1906.											1,000	.....	.....	2,000	3,000
1907.	\$50,000	.....	.....	.....	.....	.....	\$25,000	.....	.....	.....	1,000	.....	.....	.....	76,000
1908.											1,000	.....	.....	.....	1,000
1909.											6,000	.....	.....	.....	6,000
1910.															
1911.															
1912.	25,000	.....	\$37,000	.....	.....	\$45,000	25,000	.....	.....	.....	.....	.....	.....	.....	132,000
1913.				\$50,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50,000
1914.															
1915.															
1916.															
1917.							50,000	.....	\$200,000	.....	.....	.....	.....	.....	200,000
1918.															50,000
1919.															
1920.															
1921.															
1922.															
1923.															
1924.							100,000	.....	.....	.....	.....	.....	.....	.....	100,000
1925.		\$38,000	.....	.....	.....	.....	100,000	.....	.....	.....	.....	.....	.....	.....	138,000
1926.								\$50,000	.....	.....	.....	.....	.....	.....	50,000
Total	\$75,000	\$38,000	\$37,000	\$50,000	\$37,000	\$45,000	\$350,000	\$50,000	\$200,000	\$19,000	\$13,000	\$10,000	\$8,000	\$10,000	\$902,000

Available Assets.

Due from state :

State aid,	\$2,578 00	
Military aid,	406 23	
Soldiers' burial,	245 00	
		\$3,229 23

Uncollected taxes, 1898,	9 83	
" " 1899,	772 14	
" " 1900,	8,669 22	
" " 1901,	105,786 56	
		115,237 75

Tax titles,		7,359 19
Sewer assessments uncollected,		70,926 87
School house loan sinking fund,	\$18,545 03	
Sewer loan sinking fund,	88,286 37	
Water loan sinking fund,	33,762 12	
		140,593 52

Cash on hand and in bank Jan. 31, 1902,		8,838 96
		\$346,185 52

Examined and found correct.

EDWIN C. GOULD,
Auditor.

June 17, 1902.

SINKING FUNDS.

WILLIAM R. LAVENDER, Treasurer,
In account with SINKING FUND COMMISSIONERS.

School-house Loan Sinking Fund.

DR.

Balance on hand Feb. 1, 1901, . . . \$193 95

Receipts for year as follows :

Interest:

On City of Melrose note,	70 00
" Town of Clinton bonds,	350 00

Amount carried forward, . . . \$613 95

Amount brought forward,	\$613 95	
On deposit in Savings Bank,	4 50	
" deposit in National Bank,	2 22	
City of Melrose, appropriated in budget,	5,000 00	
		\$5,620 67

CR.

Payments for the year, as follows:		
Melrose National Bank, collecting Clinton coupons,		36
Balance on hand Jan. 31, 1902,		\$5,620 31
Deposited in Melrose Savings Bank,	\$198 45	
" " " National Bank,	5,421 86	
		\$5,620 31
Amount in sinking fund, Feb. 1, 1901,	\$13,118 67	
Receipts for year as per treasurer's account,	5,426 72	
		\$18,545 39
Less payments for year as per treasurer's account,		36
Amount of sinking fund Jan. 31, 1902,		\$18,545 03
Invested as follows:		
10 Town of Clinton bonds, 1930,	\$10,924 72	
Note of City of Melrose,	2,000 00	
Cash in Melrose National Bank,	5,421 86	
" " " Savings Bank,	198 45	\$18,545 03

Sewer Loan Sinking Fund.

DR.

Balance on hand, Feb. 1, 1901,		81 25
City of Melrose, paid park loan note No. 2,		1,000 00
Other receipts for year as follows:		
City of Melrose, sewer assessments collected in 1900,	36,521 65	
Amounts carried forward,	\$36,521 65	\$1,081 25

Amounts brought forward,	\$36,521 65	1,081 25
Interest:		
On City of Melrose notes,	691 68	
On City of Waltham bonds,	160 00	
On Boston & Lowell R. R. bonds,	120 00	
On Fitchburg R. R. bonds,	250 00	
On Chicago, Burlington and Quincy R. R. bonds,	105 00	
On City of Malden bonds,	100 00	
On Melrose sewer bonds,	400 00	
On deposit in Savings Bank,	2 29	
On deposit in National Bank,	25 28	
On park loan notes,	540 00	38,915 90
		\$39,997 15

CR.

Payments for year as follows:

City of Melrose, note of April 17, 1902,	\$36,521 65	
Boston Safe Deposit & Trust Co., ½ rent box,	\$8 50	
W. R. Lavender, treasurer, ½ year's salary,	25 00	33 50
		36,555 15
Balance on hand, Jan. 31, 1902,		\$3,442 00
Deposited in Savings Bank,	\$78 54	
“ “ National Bank,	3,363 46	3,442 00
Amount in sinking fund Feb. 1, 1901,	\$49,404 22	
Added during year, as per treasurer's account,	38,915 90	88,320 12
Less payments for year, as per treas- urer's account,		33 50
Amount of sinking fund, Jan. 31, 1902,		\$88,286 62

Amount brought forward, . . . \$18,739 62

CR.

Payments for year as follows:

Boston Safe Deposit and Trust Co.

½ rent box, . . . \$8 50

W. R. Lavender, treasurer ½

year's salary, . . . 25 00

\$33 50

Melrose Savings Bank:

For 5 Melrose water bonds, due

1907, . . . 5,000 00

For premium on above at 104½, 225 00

For interest to date on above, 7 22

City of Melrose:

For 5 notes each \$2,000 00 Surface

Drainage loan, first series, in-

terest at 3½%, due one each

year for 5 years, . . . 10,000 00 15,265 72

Balance on hand Jan. 31, 1902, . \$3,473 90

Deposited in Savings Bank, . . \$1,383 88

“ “ National Bank, . . 2,090 02 3,473 90

Amount of Sinking Fund Feb. 1, 1901, \$26,404 30

Added during year, as per treasurer's

account, . . . 7,391 32 33,795 62

Less payments for year, as per treas-

urer's account, . . . 33 50

\$33,762 12

Invested as follows :

4	Melrose water bonds, 1913, . . .	\$4,000 00	
10	" " " 1925, . . .	10,000 00	
1	" " " 1905, . . .	1,056 00	
5	" " " 1907, . . .	5,232 22	
5	" surface drainage, first		
	series notes, . . .	10,000 00	
	Cash Melrose Savings Bank, . . .	1,383 88	
	" " National Bank, . . .	2,090 02	33,762 12

MELROSE, MASS., June 17, 1902.

To the Committee on Treasurer's and Assessors' Accounts:

GENTLEMEN:—I hereby certify that I have examined the report of the treasurer, submitted to me by your committee, for the year from January 31, 1901, to January 31, 1902, and find them to agree with the books of this department.

I have also examined his reports as treasurer of the sinking funds and find them to agree with his books.

Respectfully,

EDWIN C. GOULD,

City Auditor.

Report of Sinking Fund Commissioners.

MELROSE, Jan. 22, 1902.

To the Honorable the Mayor and Aldermen of the City of Melrose :

The Sinking Fund Commissioners beg leave to submit the following statement of the various sinking funds in their charge, for the year ending February 1st, 1902.

THE WATER LOAN SINKING FUND.

There was brought over, at the beginning of the year, in cash,	\$1,348 30
Received from the City of Melrose, the amount of loan made to the treasurer last year,	10,000 00
Received from city, surplus on water business, for the year 1900,	5,958 12
Coupons on sundry bond investments,	900 00
Interest from City of Melrose,	464 72
Interest from Melrose National Bank,	27 90
Interest from Melrose Savings Bank,	40 58
	\$18,739 62

We have bought for investment, five Melrose water bonds, due in 1907, costing,	5,232 22
We have bought five Melrose surface drainage notes, due in 1, 2, 3, 4, and 5 years, (with interest at $3\frac{1}{2}\%$)	10,000 00
Rent of safe deposit box,	8 50
Paid W. R. Lavender, treasurer, one-half of stipend,	25 00
Cash on hand in Melrose Savings Bank,	1,383 88
" " " " Melrose National Bank,	2,090 02
	\$18,739 62
Balance to new account,	\$3,473 90

The present condition of the sinking fund is as follows:

4	Melrose Water Bonds, 1913,	\$4,000 00
10	" " " 1925,	10,000 00
1	" " " 1905,	1,056 00
5	" " " 1907,	5,232 22
5	notes (Melrose drainage loan) due in 1902 to 1906, inclusive,	10,000 00
	Cash in Melrose Savings Bank,	1,383 88
	" " " National Bank,	2,090 02
Total amount,		<u>\$33,762 12</u>

The water debt, to the payment of which the above sinking fund is to be applied, is as follows:

Series of 1885, due Nov. 1, 1905,	\$37,000 00
" " 1887, " May 1, 1907,	50,000 00
" " 1892, " May 1, 1912,	25,000 00
" " 1892, " Sept. 1, 1912,	37,000 00
" " 1893, " Oct. 1, 1913,	50,000 00
" " 1895, " July 1, 1925,	38,000 00
Total,	<u>\$237,000 00</u>

THE SEWER LOAN SINKING FUND.

Cash balance brought forward from last year,	\$81 25
Sewer assessments collected in 1900,	36,521 65
City of Melrose, paid one park loan bond,	1,000 00
Interest coupons on bond investments,	1,675 00
Interest from City of Melrose on sundry loans,	691 68
Interest on deposit Melrose National Bank,	25 28
" " deposits Melrose Savings Bank,	2 29
Total,	<u>\$39,997 15</u>

Loaned City of Melrose, on treasurer's note at 3½%,	\$36,521 65
Paid W. R. Lavender, treasurer, one half of his stipend,	25 00
Sundry expenses,	8 50
Balance deposited in Melrose National Bank,	3,363 46
" " " Savings Bank,	78 54
Total,	<u>\$39,997 15</u>

Present condition of sewer loan sinking fund:

7 Melrose park loan coupon notes,	\$7,000 00
1 Melrose park loan coupon note,	6,000 00
10 Melrose sewer bonds, due in 1917, cost	11,258 05
4 Waltham bonds, 1913, "	4,398 44
5 Fitchburg R. R. bonds, 1903, "	5,252 78
3 Boston & Lowell bonds, "	3,132 58
5 C. B. & Q. R. R. bonds, 1949, "	3,157 42
5 City of Malden, 1903 and 1904, "	5,123 70
City of Melrose demand note,	3,000 00
" " " " " "	36,521 65
Cash in Melrose Savings Bank,	78 54
" " " National Bank,	3,363 46
	<u>\$88,286 62</u>

The sewer loan, to the payment of which the
above sinking fund will be applied, is as
follows:

Series of 1897, due June 1st, 1907,	\$25,000 00
" " 1897, " " " 1912,	25,000 00
" " 1897, " " " 1917,	50,000 00
" " 1894, " " " 1924,	100,000 00
" " 1895, " " " 1925,	100,000 00
" " 1896, " " " 1926,	50,000 00
Total,	<u>\$350,000 00</u>

SCHOOL HOUSE LOAN SINKING FUND.

There was brought over from old account,	\$193 95
Received from Town of Clinton, coupons,	350 00
Received from City of Melrose, interest,	70 00
" " Melrose Savings Bank,	4 50
" " Melrose National Bank,	2 22
" " City of Melrose, an appropriation from the budget of 1901,	5,000 00

Total, \$5,620 67

There is deposited in Melrose National Bank, temporarily, waiting investment,	5,421 86
There is deposited in Melrose Savings Bank,	198 45
Collecting coupons,	36

\$5,620 67

Present condition of school house sinking fund :

10 Town of Clinton bonds, due in 1930, cost	10,924 72
Demand note, City of Melrose,	2,000 00
Cash in Melrose Savings Bank,	198 45
Cash in Melrose National Bank,	5,421 86

Total, \$18,545 03

We recommend the annual appropriation to this
sinking fund of 5,000 00

The school house loan, to the payment of which
the above fund is to be applied, is due
February 4th, 1916, 200,000 00

We shall next year, and hereafter from year to year, as
we buy bonds for investment, charge off the premiums, so
that all bonds may appear in our statement at their par
value.

In all these accounts we refer to our treasurer's statement
for a more specific account of receipts and disbursements.

Respectfully submitted,

DANIEL RUSSELL,
JOHN W. FARWELL,
ROYAL P. BARRY,

Sinking Fund Commissioners.

REPORT.
OF THE
CITY AUDITOR
OF THE
CITY OF MELROSE.

To the Honorable, the Board of Aldermen of the City of Melrose:

GENTLEMEN:—I have the honor to submit herewith a statement of the receipts and expenditures of the City of Melrose, beginning on the first day of February 1901, and ending of the financial year on the thirty-first day of January, 1902, with a detailed statement of each department, a statement of assets and liabilities, a table showing the funded debt, the dates on which the notes and bonds are payable, together with a schedule of the city property.

Respectfully submitted,

EDWIN C. GOULD,
City Auditor.

City of Melrose, Auditor's office.

FINANCES.

The assessed valuation of the city May 1, 1901, was:

Real estate, \$13,603.875 00

Personal estate, including resi-
dent bank stock, 1,286,890 00

Total valuation, \$14,890,765 00

Increase in valuation from		
May 1, 1900, to May 1,		
1901,		\$2,112,400 00
Number of dwelling houses,		
May 1, 1901,	3,248	
Population,	12,715	
Rate of taxation per \$1,000.00 for 1901, \$16.20		
was divided as follows, to wit:		
City tax,		\$14 24
County tax,		65
State tax,		25
State Metropolitan parks,		41
" " sewerage,		65
		\$16 20
The municipal debt, Jan. 31, 1901,		61,000 00
Increase of debt,		44,000 00
		\$105,000 00
Decrease by payments,		20,000 00
Total municipal debt, Jan. 31, 1902,		\$85,000 00
Total increase for the year,		24,000 00

CITY OF MELROSE MUNICIPAL DEBT,
JANUARY 31, 1902.

Central fire station, note due Aug.		
1, 1902,		\$10,000 00
Park loan, note due May 15, 1902,	\$1,000 00	
" " " " " " 1903,	1,000 00	
" " " " " " 1904,	1,000 00	
" " " " " " 1905,	1,000 00	
" " " " " " 1906,	1,000 00	
" " " " " " 1907,	1,000 00	
" " " " " " 1908,	1,000 00	
" " " " " " 1909,	6,000 00	
		13,000 00

Public grounds, note due Apr. 25,	
1903,	\$10,000 00
Stone crusher, note due Jan. 6, 1903,	8,000 00

Surface drainage loans:

Note due Oct. 30, 1902, . . .	\$2,000 00	
" " " " 1903, . . .	2,000 00	
" " " " 1904, . . .	2,000 00	
" " " " 1905, . . .	2,000 00	
" " " " 1906, . . .	2,000 00	
		10,000 00
Park street loan, note due Nov. 2, 1902,	\$500 00	
Sidewalk, " " " " " "	2,000 00	
City hall improvement loan, note		
due Nov. 2, 1902, . . .	5,500 00	
Highway loan, note due Nov. 2, 1902,	5,000 00	
General contingent, note due Nov.		
2, 1902,	2,000 00	
		15,000 00
Central fire station, note due Jan. 4,		
1905,	10,000 00	
New school building, note due Jan.		
4, 1905,	6,000 00	
High school grounds, note due Jan.		
4, 1905,	3,000 00	
		19,000 00
Total,		\$85,000 00

BONDED DEBT.

School House Debt.

School house bonds, 4% due Feb.	
24, 1916,	\$200,000 00
Less sinking funds,	18,545 03
	\$181,454 97

Debt Statement.

Total amount Jan. 31, 1901,	\$804,072 81
Decrease in 1901,	27,666 58
	\$776,406 23
Decrease in school house debt,	5,426 36
" " sewerage "	38,882 40
" " water "	7,357 82
	\$51,666 58
Increase in municipal debt,	24,000 00
Net decrease,	\$27,666 58

CASH ACCOUNT FOR 1901.

Cash on hand Jan. 31, 1901,	\$2,468 41
Cemetery,	5,011 07
Charity,	3,333 87
Commonwealth of Mass.,	15,226 98
Public library,	1,033 60
Public works department,	25,553 05
School department,	1,943 71
Sewer assessments,	12,373 23
Sundries, accounts,	1,018 83
Taxes collected,	241,014 53
Tax titles, redemption of,	1,561 91
Temporary loans,	107,600 00
Trust funds income,	1,088 16
Water income,	49,138 85
Treasury,	1,569 97
Municipal and permanent debt,	44,000 00
	\$513,936 17
Feb. 28, by payments,	12,442 91
March 30, by payments,	48,310 15
April " " "	20,702 55
May 31, " " "	40,728 38

June 29, by payments,		\$28,275	66
July 31, " "		31,558	54
Aug. 30, " "		34,954	45
Sept. 30, " "		24,609	00
Oct. 31, " "		50,974	97
Nov. 30, " "		82,051	34
Dec. 31, " "		83,956	66
Jan. 31, " "		46,532	60
		\$505,097	21
Jan. 31, cash on hand,		8,838	96
		\$513,936	17

TREASURY.

Balance 1900,		\$1,629	80
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RECEIPTS.

Briry, W. S., inspector of milk and vinegar, fees,	\$52	00
Dole, W. H., hog licenses, fees,	49	00
Fire department, old hose sold,	52	50
First district court, fines,	161	95
House of Correction, fines,	40	00
Hunter, W. D., rent of city hall,	335	17
Jones, W. De H., city clerk, fees,	325	60
Pierce, W. L., sealer of weights and measures, fees,	48	20
Police department, Insurance Co.,	4	75
Sidewalks, collections 1898, 1899,	99	24
" " individual, 1901,	401	56
	\$1,569	97
Transferred from new continuous sidewalks,	146	21

Transferred from unexpended bal- ances, 1900,	\$1,843 77	
		\$3,559 95
		\$5,189 75

EXPENDED.

Transferred to aldermanic chamber,	\$60 00	
" " aldermen's contingent,	6 00	
" " assessors' "	50 00	
" " city clerk's "	206 30	
" " " hall improvement,	300 00	
" " claims,	100 00	
" " edgestones, Main street,	669 00	
Transferred to fire department, hay and grain,	202 15	
Transferred to Fourth of July cele- bration,	350 00	
Transferred to general contingent, .	15 00	
" " inspector of buildings, salary,	200 00	
Transferred to inspector of milk and vinegar, contingent,	25 00	
Transferred to permanent debt, .	1,000 00	
" " stone bounds,	350 00	
	\$3,533 45	
Balance to 1902,	1,656 30	
	\$5,189 75	5,189 75

LEDGER BALANCES, JAN. 31, 1902.

Aldermanic chamber,		\$60 00
Cash,	\$8,838 96	
Cemetery	8,058 38	

Charity department, 1900,	\$1,375 97	
" " 1901,		\$12 12
Contingent, city clerk,		1 01
" aldermanic,		24
" general,		263 70
Assessors' department,		8 17
Fire department,		508 55
Health,	750 45	
Insurance,		28 49
Interest,		5,449 36
Military aid,	168 94	
Police department,		1 36
Public library,		84 36
Salaries,		115 02
School department,	2,330 43	
Soldiers' relief,	1,332 78	
State aid,	215 00	
Toothaker, E., fund,		1,419 92
Engineering department,		68 23
Park department,		87 84
City hall,		48 07
Highway division,		2 55
Stone bounds,		114 24
Public works office,		18 25
Sewer division,		3,413 43
Edgestones, Main street,		669 00
Sidewalks,		30 99
Street lights,	966 09	
Street sprinkling,	1,901 36	
Water department,		7,312 45
Treasury,		1,656 30
Commonwealth of Mass.,	3,229 23	
Metropolitan park,		12,461 55
Ell pond park,	1,211 25	
Cemetery trust funds,		7,427 50
Temporary loans,		103,121 65
Overlays,		8,958 00

Taxes, uncollected,	\$115,237 75	
Taxes, titles,	7,359 19	
Deficiencies, Jan'y, 1900,	1,401 23	
Surface drainage,	235 69	
Claims,	75 00	
Inspector of buildings,		\$9 75
" " Vinegar,		3 00
Printing town report,	212 00	
City hall improvement,		1,544 60
Sewer assessments, uncollected,	70,926 87	
Sewer assessment fund, unpaid,		70,926 87
	\$225,826 57	\$225,826 57
Municipal and permanent debt,	85,000 00	
School house debt,	200,000 00	
Sewer debt,	350,000 00	
City hall debt,	45,000 00	
Water debt,	237,000 00	
School house loan sinking fund commissioners,	18,545 03	
Sewer loan sinking fund com- missioners,	88,286 62	
Water loan sinking fund com- missioners,	33,762 12	
Municipal and permanent loans,		85,000 00
School house bonds,		200,000 00
Sewer bonds,		350,000 00
City hall bonds,		45,000 00
Water bonds,		237,000 00
School house loan sinking funds,		18,545 03
Sewer loan sinking funds,		88,286 62
Water " " "		33,762 12
	\$1,283,420 34	\$1,283,420 34

CITY OF MELROSE, BALANCE SHEET.
JANUARY 31, 1902.

ASSETS AND LIABILITIES FROM APPROPRIATIONS,
1898 to 1901.

Assets.

Cash in treasury,	\$8,838 96	
Balance due from cemetery, .	8,058 38	
Charity department, 1900,	1,375 97	
Health "	750 45	
Military aid,	168 94	
School department,	2,496 40	
Soldiers' relief,	1,332 78	
State aid,	215 00	
Sidewalks,	193 34	
Street lights,	966 09	
Street sprinkling,	1,901 36	
Commonwealth of Mass., .	3,229 23	
Ell pond park,	1,211 25	
Uncollected taxes,	115,237 75	
Tax titles,	7,359 19	
Deficiencies, 1900,	1,401 23	
Surface drainage,	235 69	
Claims,	75 00	
Printing town report,	212 00	
		\$155,259 01

Liabilities.

By Toothaker fund,	\$1,419 92
Cemetery trust funds,	7,427 50
Overlays,	8,958 00
Charity department,	12 12
City clerk's contingent,	1 01
General contingent,	263 70
Aldermen's contingent,	24

By Assessors' department,	\$ 8 17	
Fire department,	508 55	
Police,	1 36	
Public library,	84 36	
Salaries,	115 02	
School department,	165 97	
Engineer's department,	68 23	
Park,	87 84	
City hall,	48 07	
Highways,	2 55	
Public works office,	18 25	
Inspector of buildings,	9 75	
" " vinegar,	3 00	
Treasury,	1,656 30	
Edgestones,	669 00	
Aldermen's chamber,	60 00	
Sidewalks,	224 33	
City hall improvement,	1,544 60	
Temporary loans,	103,121 65	
Interest,	5,449 36	
Insurance,	28 49	
Street bounds,	114 24	
Metropolitan park,	12,461 55	
Sewer department,	3,413 43	
Water "	7,312 45	
		\$155,259 01

CITY OF MELROSE, ASSETS AND LIABILITIES.

Assets.

To amount invested in land, buildings, parks and other property,	\$761,259 49
To amount invested in school house sinking funds,	18,545 03

To amount invested in sewer sinking funds,	\$88,286 62
To amount invested in water sinking funds,	33,762 12
Total cost of Melrose sewer system,	367,816 91
Total cost of Melrose water system,	438,502 40
Total cost of Melrose surface drainage,	14,748 46
	\$1,722,921 03

Liabilities.

By total municipal indebted- ness,	\$917,000 00
Assets exceed liabilities, . . .	805,921 03
	\$1,722,921 03
	\$1,722,921 03

AUDITOR'S REPORT SHOWING AGGREGATE TRANSACTION IN EACH CITY ACCOUNT.

ACCOUNTS.	Balance from 1900.	Appropriations	Transfers to	Receipts.	Overdrawn 1900.	Transfers from	Expenditures	Unexpended balance.	Overdrawn.
Aldermanic chamber.....	\$63.13	.....	\$60.00	.....	.....	\$63.13	.....	\$60.00	.....
Cemetery, Wyoming.....				\$5,011.07	.....	.....	.....	21.74	.....
Charity department, 1900..				627.12	\$2,003.09	.....	\$4,989.33	.....	\$1,375.97
Aid of Poor.....		\$8,500.00	224.60	2,706.75	.....	.....	11,419.23	12.12	.....
Furniture, etc.....		300.00	.....	.....	.....	180.60	119.40	.....	.....
Clerical assistance.....		200.00	.....	.....	.....	44.00	156.00	.....	.....
City clerk, clerical assistant.		750.00	.....	.....	.....	.....	750.00	.....	.....
Claims.....			757.50	.....	.....	.....	832.50	.....	75.00
Commonwealth of Mass.....				3,125.71	3,125.71	168.00	.....	.....	168.00
Contingent, aldermanic....	106.80	200.00	6.00	.....	.....	106.80	205.76	.24	.....
City clerk.....			206.30	218.70	.....	.....	423.99	1.01	.....
Collector.....	34.52	930.00	.....	.....	.....	34.52	930.00	.....	.....
General.....		2,500.00	15.00	2,000.00	190.20	982.50	3,078.60	263.70	.....
Inspector of Buildings.....	12.50	.....	.....	.....	.....	.....	2.75	9.75	.....
“ of Milk & Vinegar.....			25.00	.....	.....	.....	22.00	3.00	.....
Mayor's.....			100.00	.....	.....	.....	100.00	.....	.....
Assessors' Transfers.....		50.00	.....	.....	.....	.....	50.00	.....	.....
Street books.....		14.00	.....	.....	.....	.....	14.00	.....	.....
Cash & st. watering books		20.00	.....	.....	.....	.....	20.00	.....	.....
Printing poll books.....		200.00	.....	.....	.....	.....	200.00	.....	.....
Carriage hire.....		75.00	.....	.....	.....	.....	75.00	.....	.....
Maine stock.....		8.00	.....	.....	.....	.....	8.00	.....	.....
Michigan stock.....								8.00	.....
Contingent.....		175.00	50.00	.....	.....	.....	224.83	.17	.....
Fire department.....	202 15	.....	.....	.....	.....	202.15	.....	.....	.....
Permanent drivers.....		3,120.00	.....	.....	.....	.....	3,120.00	.....	.....
Electrician and driver....		876.00	.....	.....	.....	.....	876.00	.....	.....
Engineer of steamer.....		300.00	.....	.....	.....	.....	300.00	.....	.....
Call men.....		2,750.00	.....	.....	.....	200.00	2,429.19	120.81	.....
Chief Engineer.....		150.00	.....	.....	.....	.....	150.00	.....	.....

Asst. Engineers.....	225.00			225.00		
House steward.....	40.00			40.00		
Hay, oats and straw.....	550.00	202.15		668.56		83.59
Coal and wood.....	400.00			328.50		71.50
Horse shoeing.....	160.00			154.63		5.37
Expressing.....	40.00		4.05	17.79		26.26
Laundry.....	50.00			40.96		9.04
Fire alarm.....	375.00	225.00		589.75		10.25
Horse hire.....	200.00			178.00		22.00
New hose.....	525.00			508.50		16.50
Telephone and lights.....	260.00			158.12		101.88
Contingent.....	300.00	200.00		458.65		41.35
Health Dept. collecting ashes.....				381.50		381.50
Removal of garbage.....	1,200.00			1,200.00		
Fumigating.....	150.00		50.00	229.00		29.00
Salary, Ins. of Plumbing.....	650.00			650.00		
Contingent.....	675.82		41.50	1,057.27		339.95
Insurance.....	12.97			1,632.48		28.49
Interest.....	5,507.15		685.58	30,501.93		5,449.36
Melrose Hospital.....	24,000.00	5,758.56		1,000.00		
Memorial Day.....	1,000.00			200.00		
Military Aid.....	200.00			462.46		407.17
Police Department.....	55.29					
Sal. Chief & reg. officers.....	.59				.59	
Salaries of special officers.....	10,150.00	193.74		10,343.74		
Sal. of night watchman.....	700.00	36.76		736.76		
Contingent.....	500.00			382.50		
Public Library.....	550.00			435.64		1.36
Rent and heating.....	70.51				70.51	
Salaries, books, etc.....	1,225.00			1,200.00		25.00
Salaries.....	1,775.00	70.51	1,033.60	2,819.75		59.36
Salaries, City Auditor.....	282.80				282.80	
Clerk.....	500.00			500.00		
Collector.....	1,200.00			1,200.00		
	1,000.00			1,000.00		

AUDITOR'S REPORT SHOWING AGGREGATE TRANSACTION IN EACH CITY ACCOUNT.

ACCOUNTS.	Balance from 1900.	Appropriations	Transfers to	Receipts.	Overdrawn 1900.	Transfers from	Expenditures	Unexpended balance.	Overdrawn
Salaries, Treasurer.....		\$750.00	.....	.....	.....	.....	\$750.00	.....	.....
Assessors.....		900.00	.....	.....	.....	.....	825.00	\$75.00	.....
" clerk.....		850.00	.....	.....	.....	.....	850.00	.....	.....
Eng. and Supt. Pub. Wks.		2,250.00	.....	.....	.....	.....	2,250.00	.....	.....
Board of Health.....		300.00	.....	.....	.....	.....	300.00	.....	.....
Mayor.....		500.00	.....	.....	.....	.....	500.00	.....	.....
Inspector of Buildings.....		300.00	\$200.00	.....	.....	.....	500.00	.....	.....
" of Milk and Vinegar.....		100.00	.....	.....	.....	.....	100.00	.....	.....
" " Animals & Prov.....		100.00	.....	.....	.....	.....	64.14	35.86	.....
Overseers of Poor.....		400.00	.....	.....	.....	.....	395.84	4.16	.....
Registrars of Voters.....		200.00	.....	.....	.....	.....	200.00	.....	.....
Sealer of Weights & Meas.....		200.00	16.66	.....	.....	.....	216.66	.....	.....
Solicitor.....		500.00	.....	.....	.....	.....	500.00	.....	.....
Agt. Military & State Aid		100.00	.....	.....	.....	.....	100.00	.....	.....
School Department:									
Teaching & supervision		55,920.00	.....	.....	.....	\$375.00	55,380.35	164.65	.....
Janitors.....		6,004.00	.....	.....	.....	.....	6,004.00	.....	.....
Books and supplies.....		5,525.00	275.00	.....	.....	.....	5,799.26	74	.....
Fuel.....		5,500.00	500.00	.....	.....	.....	7,449.89	.....	\$1,440.89
Repairs.....		2,700.00	.....	.....	.....	.....	3,700.00	.....	1,000.00
Furniture.....		600.00	.....	.....	.....	.....	599.71	29	.....
Transportation of pupils		480.00	.....	.....	.....	.....	480.00	.....	.....
Printing.....		171.00	100.00	\$11.60	.....	.....	282.55	.05	.....
High sch. & teachers' lib'y		100.00	.....	.....	.....	.....	99.76	24	.....
Contingent.....			100.00	1,932.11	.....	600.00	1,478.62	.....	46.51
Soldiers' burial.....							210.00	.....	210.00
" relief.....		1,250.00	158.00	.....	\$532.15	4.00	2,214.63	.....	1,332.78
State aid.....			4.00	19.00	.....	.....	2,601.00	.....	2,578.00
Surety bonds.....		233.00	.....	.....	.....	.....	233.00	.....	.....
Taxes, County.....		13,388.55	.....	.....	.....	.....	13,388.55	.....	.....

AUDITOR'S REPORT SHOWING AGGREGATE TRANSACTION IN EACH CITY ACCOUNT.

ACCOUNTS.		Balance from 1900.	Appropriations	Transfers to	Receipts.	Overdrawn 1900.	Transfers from	Expenditures	Unexpended balance.	Overdrawn
Sewer division construction		\$477.79	\$925.00	\$10,879.83	\$4,599.24			\$13,890.25	\$2,991.61	
Private sewers.....					2,919.60			2,838.94	80.66	
½ rent of yard.....			175.00					175.00		
Maintenance.....			800.00					390.68	338.01	
Contingent.....			100.00				71.31	96.85	3.15	
Sidewalks.....		179.83					179.83			
Repairs to present walks.....			500.00		663.44			1,356.78		\$193.34
New individual walks.....			700.00		2,165.63			2,715.75	149.88	
Complete continuous walks.....										
New continuous walks.....			800.00				146.21	653.79		
Edgestones, Main street.....			1,000.00		500.00			1,425.55	74.45	
Street lights.....				669.00					669.00	
Street sprinkling.....		25.02	11,000.00				25.62	11,966.09		966.09
Surface drainage.....					3,541.21	\$1,900.06		3,342.51		1,901.36
Water fund.....				639.19	10,329.49			11,204.37		235.69
Construction.....		11,688.90		5,015.60	49,138.85		36,973.72	21,699.32	7,173.31	
Maintenance.....				3,550.00	67.93			3,390.15		
Relaying pipe.....				10,556.68	5,871.54			16,316.86		
City hall improvement.....				15,000.00	3,488.24		4,106.68	14,381.56		
Ell pond park.....				300.00	5,500.00			4,255.40		
Fourth of July celebration.....		936.57						2,147.82	1,544.60	1,211.25
Printing town report.....				350.00				350.00		
Sewer assessments collected.....		36,521.65			12,373.23		12,373.23	36,521.65		212.00
Trusts funds, cemetery.....		6,462.50			965.00				7,427.50	
E. Toothaker fund.....		1,582.11			123.16			285.35	1,419.92	
Treasury.....		1,629.80		1,689.98	1,569.97		3,533.45		1,656.30	

Taxes, collected.....	.....	7,440.58	241,014.53	.....	5,380.44	.....	243,074.67	.....
" refunded.....	.....	20.51	.....	.....	.....	20.51	.....	.....
" takings.....	.....	.....	1,561.91	8,553.20	.....	5,367.90	.....	7,359.19
Debt, Municipal.....	.....	1,000.00	44,000.00	.....	.....	20,000.00	25,000.00	.....
Loans, temporary.....	64,600.00	.....	144,121.65	.....	.....	105,600.00	103,121.65	.....
	\$212,248.93	\$248,652.39	\$572,989.41	\$27,190.37	\$75,656.84	\$541,618.86	\$487,955.42	\$22,873.92
		212,248.93					541,618.86	
		75,656.84					75,656.84	
		572,989.41					27,190.37	
		22,873.92						
		<u>\$1,132,421.49</u>					\$1,132,421.49	

ALDERMANIC CHAMBER.

Balance for 1900,	\$63 13	
Transferred from treasury for seats,	60 00	
		\$123 13

EXPENDED.

Transferred to treasury,	\$63 13	
Balance to 1902,	60 00	
	\$123 13	\$123 13

CEMETERY.

RECEIPTS.

Cash for dressing,	\$ 13 50	
" " foundations,	286 00	
" " flowers,	10 50	
" " graves, single,	136 00	
" " interments,	571 00	
" " labor,	227 00	
" " lots, care of	1,520 84	
" " " sale of	2,055 48	
" " markers,	22 75	
" " use of tomb,	35 00	
" " vaults,	110 00	
" " wood,	23 00	
		\$5,011 07

EXPENDED.

Barbour, Stockwell & Co., grave mark- ers and numbers,	\$63 99
Benson & Co., S. E., cement and lime,	13 15
Boardman & Co., W. W., hack hire,	4 00
Boston & Maine R. R., freight,	80
Bowser, W. J., blacksmith work,	95

Breck & Sons Co., J., grass seed, . . .	\$28 16
Breck & Sons Co., J., mowers and tools, . . .	15 05
Casey, C., plants and flowers, . . .	29 25
Colligan, Ann, gravel, loam, sod, . . .	52 55
Coyle, F. E., lanterns and tools, . . .	3 85
Davis & Twombly, expressage, . . .	2 70
Deering, J. P., salary 1900, 1901, . . .	50 00
Deering & Co., J. P., lumber, . . .	1 70
Dunton & Co., A. W., printing, . . .	13 00
Eastman's express, expressage, . . .	50
Everson, C. H., hardware for office building,	2 50
Everson, C. H., making tank, . . .	19 78
" " repairing barrows, . . .	7 25
Frost, Oscar F., salary 1901, . . .	25 00
Gibbons, J., manure and hauling, . . .	23 75
" " hauling gravel, . . .	18 02
Goss, C. B. & F. H., cement, lime and fertilizer,	39 30
Gould, E. C., clerical services, 1900, 1901,	125 90
Hills & Gibson, painting signs, . . .	6 00
Hocking, A., postmaster, stamps, . . .	20 00
Jefts, Wm. A., stove pipe and labor, . . .	5 50
Kelley, M., sod,	26 75
Kunhardt, L. H., salary 1901, . . .	25 00
Larrabee, J., salary 1900,	25 00
Lead Lined Iron Pipe Co., pipe and fitting,	51 10
Leavitt, R. A., sundry cash expenses, . . .	8 32
Luce, A. A., manure,	8 00
McCoubry, W. J., sharpening tools, . . .	3 60
Melrose Hardware Co., hardware and tools,	24 90
Merchant's Melrose Express Co., ex- pressage,	1 25
Miller, John, manure,	40 00
Norris & Co., "	24 75
Portal, J. M., cleaning headstones, . . .	30 00

Potter, S. G., stationery and books, . . .	\$4 12	
" " printing deeds and rules and regulations,	67 65	
Ricker, J. E., account book,	1 25	
Shady Hill Nursery Co., bulbs,	10 00	
Smith Bros., repairing and sharpening, mowers,	15 60	
Stevens, Harry, drain pipe,	5 17	
Whittier & Co., shrubs,	27 97	
Woodman, J. C., salary 1900,	25 00	
Woodward, D. H., filig saw,	25	
Pay rolls, superintendent, men and teams,	3,991 00	
		\$4,989 23
Receipts exceed expenditures,		\$21 74

CHARITY DEPARTMENT, 1900.

Overdraft, 1900,	\$2,003 09 .
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RECEIPTS.

Buttrick, S. H., from farm,	\$55 09	
Commonwealth of Mass., support of state paupers,	195 59	
Commonwealth of Mass., contagious diseases,	90 95	
Crocker, B. F., care in insane hospital,	42 27	
Malden, city of, aid furnished,	12 90	
Wenham, town of, aid furnished,	230 32	
Total receipts,	\$627 12	
Overdraft to 1902,	1,375 97	
	\$2,003 09	\$2,003 09

CHARITY DEPARTMENT, 1901.

AID OF POOR.

Appropriation,	\$8,500 00	
Transfer from furniture, stationery, etc.,	180 60	
Transfer from clerical assistance,	44 00	
Received from Commonwealth of Mass.	526 00	
" " Individuals,	375 47	
" " Sale of produce,	808 11	
" " Board of health,	121 46	
" " Boston, city of	40 48	
" " Danvers, city of	117 52	
" " Lynn, " "	48 60	
" " Malden, " "	60 10	
" " Taunton, " "	10 00	
" " Braintree, town of	248 41	
" " Lexington, " "	34 75	
" " Needham, " "	131 49	
" " Wakefield, " "	13 00	
" " Wenham, " "	171 36	
		\$11,431 35

EXPENDED.

See overseer of poor's report for details,	\$11,419 23	
Balance,	12 12	
	\$11,431 35	\$11,431 35

FURNITURE, BOOKS, ETC.

Appropriation,	\$300 00
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EXPENDED.

See overseer of poor's report for details, \$119 40	
Transferred to aid of poor,	180 60
	\$300 00
	\$300 00

CLERICAL ASSISTANCE.

Appropriation,	\$200 00
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EXPENDED.

See overseer of poor's report for details, \$156 00	
Transferred to aid of poor, 44 00	
	\$200 00
	\$200 00

CITY CLERK'S OFFICE, CLERICAL ASSISTANCE
AND CLERK OF COMMITTEES.

Appropriation,	\$750 00
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EXPENDED.

Kirmes, V. C., services, 12 mos., \$750 00	
Total expended, \$750 00	\$750 00

CLAIMS.

Transferred from general contingent, \$657 50	
" " treasury, 100 00	
	\$757 50

EXPENDED.

Jack, E. S., M. D., professional services, Spinney case, \$10 00	
Kirmes, V. C., services, Jan. 1900, 50 00	
Lynde, A. W., use of horse, 1900, 50 00	
Odlin, C. C., M. D., professional services, Spinney case, 10 00	
Russell, H. O., damages to, 75 00	
Spinney, Emma E., damages to, 637 50	
Overdraft,	75 00
	\$832 50
	\$832 50

COMMONWEALTH OF MASSACHUSETTS.

EXPENDED.

Amount transferred to soldiers' relief fund,	\$168 00
Amount transferred to military aid,	238 23
" " " state aid,	2,578 00
" " " soldiers' burial,	245 00
	\$3,229 23

Refunded by Commonwealth, Dec., 1902.

CONTINGENT, ALDERMANIC.

Balance from 1900,	\$106 80
Appropriation,	200 00
Transferred from treasury,	6 00
	\$312 80

EXPENDED.

Adams, Cushing & Foster record book,	\$9 00
Commonwealth of Mass., secretary's office, revised laws,	6 00
Dimond & Co., H. C., stamps and pads,	5 65
Dunton & Co., A. W., advertising and printing,	23 00
Gay & Co., A. R., record books for committees,	8 25
Jones, W. DeHaven, cash expenses,	7 60
Melrose Journal, advertising and printing,	24 75
Pierce & Son, A. B., draping Alderman Howes' desk and chair,	5 00
Pierce, W. L., distributing notices and warrants,	34 20
Potter, S. G., printing, stationery, etc.,	82 31
Total expended,	\$205 76
Transferred to treasury,	106 80
Balance to 1902,	24
	\$312 80
	\$312 80

CITY CLERK'S CONTINGENT.

Receipts, transferred from treasury, . .	\$206 30	
Receipts, cash fees,	218 70	
		\$425 00
Total fees collected by clerk, \$544 30		
Balance credited to treasury, 119 30		

EXPENDED.

American Express Co., expressage, . .	\$ 8 45	
Blanchard & Co., F. S., year book, . .	3 00	
Cameron & Co., J. A., desk lamp, . .	4 67	
Dunton & Co., A. W., printing, . . .	11 00	
Eastman's Express, expressage, . . .	30	
Hayes, Mrs. A. M., canvassing, births,	16 50	
Jones, W. DeHaven, cash expenses,		
postage, blanks, etc.,	89 14	
MacArthur, Miss, canvasing, births,	21 00	
Melrose Journal, printing,	2 50	
Morss, Wm., contract, labor on vault,	46 61	
N. E. Telephone & Telegraph Co.,		
rentals and tolls,	37 82	
Pierce, W. L., posting notices, ^a . . .	3 00	
Potter, S. G., printing and stationery,	57 50	
Returns of births, physicians,	51 75	
Returns of deaths, undertakers, . . .	63 25	
Sampson, Murdock & Co., Boston		
directory,	5 00	
Smith, W. A., repairing clock,	1 25	
The Carter Ink Co., ink,	1 25	
Total expended,	423 99	
Balance,	1 01	
	\$425 00	\$425 00

COLLECTOR'S CONTINGENT.

Balance from 1900,	\$34 52	
Appropriation, 1901,	930 00	
		\$964 52

EXPENDED.

Bailey, Thomas T., salary 1 year,	\$500 00	
Brock Brothers, mantle and chimney,	60	
Drown, F. B., distributing tax bills,	12 00	
Dunton & Co., printing,	69 00	
Hobbs & Warren, book and supplies,	11 00	
Larrabee & Stearns, sponge and pens,	1 15	
Merrill, C. E., distributing tax bills,	6 79	
Murray, J. W., postage stamps,	149 40	
N. E. Telephone and Telegraph Com- pany, rental and tolls,	15 50	
Orpin Brothers, desks and chairs,	100 00	
Pierce, W. L., distributing tax bills,	31 21	
Potter, S. G., printing and stationery,	32 72	
The Carter Ink Co., ink,	63	
Total expended,	\$930 00	
Transferred to treasury,	34 52	
	\$964 52	\$964 52

GENERAL CONTINGENT.

Appropriation,	\$2,500 00	
Proceeds of loan,	2,000 00	
Transferred from treasury,	15 00	
		\$4,515 00

EXPENDED.

Allen Bros., door numbers,	\$7 32
American Express Co., expressage,	15

Altamont Ice Co., ice for fountain, . . .	\$60 00
Boston Regalia Co., portrait of President McKinley,	12 00
Brock Bros., stock and labor,	4 00
Cameron, J. A., desk lamps,	9 36
Cate, F. S., M. D., examination of candidates, civil service,	8 00
Childs, E. O., registrar, recording deeds,	2 44
Clement's Emporium, cambric, McKinley memorial,	30 86
Com. of Mass., revised laws,	6 00
Copeland, I. C., mimeograph,	20 00
Dimond & Co., H. C., woodcuts and electrotypes,	3 32
Drown, O. E., staging on platform, McKinley memorial,	6 00
Dunton & Co., A. W., advertising and printing, election,	202 55
Dunton & Co., A. W., printing city report,	506 08
Dunton & Co., A. W., printing,	25 50
Eastman's express, expressage,	1 30
" " " chairs	
McKinley memorial,	20 00
Eastman, M. F., rent ward rooms, election,	53 00
Frost & Hawes, oil for ward rooms, election,	66
Gately, John H., burial of P. F. Crosby,	100 00
Goss, C. B. & F. H., fuel for ward rooms, election,	75
Goodno, W. A., team and labor, election,	48 90
Gourley, C. F., services officer, election,	4 00
Green, H. G.,	5 00
Hocking, A., P. M., box rent and stamps,	22 10

Hurd, W. A., meals, registrars of voters, election,	\$25 10
Hyde, G. E., services officer, election,	4 00
Jones, W. DeHaven, returns of births, marriages and deaths,	206 30
Jones, W. DeHaven, cash expenses, election,	5 12
Keating, P. S., carriages, McKinley memorial,	1 00
Knights, Saul, ringing bells,	8 00
Larrabee & Stearns, paper, election,	4 80
Lavender, W. R., cash expenses,	13 66
Lynde, A. W., services special officer, election,	3 25
Main, J. H., services special officer, election,	3 25
McIlwrath, A. B., ringing bells,	8 00
Malden Electric Co., lamps, election,	2 40
Melrose club stable,	1 50
Melrose Journal, ad. and printing,	47 00
" " " " " election,	54 00
Merrill, F. H., Jr., ringing bell,	2 00
Morse, F. H., M. D., returning births,	3 25
Morss, Wm., estimate on city hall,	10 00
" " labor, election,	2 72
" " " on vault,	1 02
" " draping city hall, McKin- ley memorial,	19 15
N. E. Telephone & Telegraph Co., rental and tolls,	118 71
Pay roll, ward officers, election,	776 00
" " decorating city hall, Mc- Kinley memorial,	14 69
Perry, H. J., fitting keys,	45
Pierce, F. N., services special officer, election,	3 25
Pierce, W. L., posting and distributing notices, election,	47 00

Pierce, W. L., posting and distributing notices, McKinley memorial, . . .	\$5 00
Pneumatic Hand Stamp Co., stamps, . .	13 18
Potter, S. G., printing, election, . . .	297 45
“ “ “	13 10
“ “ “ McKinley memorial,	4 80
Ryan, J., tools for sealer of weights and measures,	4 40
Shepherdson, A., portrait of Ex-Mayor Gould,	50 00
Slocumb, E. C., services special officer, election,	3 25
Smith Bros., repairs to check stamp, . .	50
Stone, H. W., engrossing resolutions, McKinley memorial,	15 00
Thorp & Martin Co., books, etc., treasurer,	25 61
Twitchell & Co., C. A., license badges, . .	27 00
Trustees Wyoming Lodge, rent ward room, election,	30 00
Wadsworth, Howland & Co., mounting maps,	5 00
C. J. Wing, janitor ward room, election, . .	6 00
C. J. Wing, ringing bells,	4 00
C. Joseph Wing, ringing bells,	4 00
“ “ “ janitor ward room, election,	25 40
Total expended,	\$3,078 60
Transferred to claims account,	657 50
“ “ mayor's contingent,	100 00
“ “ fire department, fire alarm,	225 00
Overdraft 1900,	190 20
Balance,	263 70

\$4,515 00 \$4,515 00

INSPECTOR OF BUILDINGS.

Balance,		\$12 50
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EXPENDED.

Potter, S. G., printing,	\$2 75	
Balance,	9 75	
	<u>\$12 50</u>	<u>\$12 50</u>

INSPECTOR OF MILK AND VINEGAR.

Transferred from treasury,	\$25 00
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EXPENDED.

Knolt Apparatus Co., L. E., testing apparatus,	\$16 25	
Melrose Journal, advertising,	3 50	
Potter, S. G., printing,	2 25	
	<u>\$22 00</u>	
Balance,	3 00	
	<u>\$25 00</u>	<u>\$25 00</u>

CONTINGENT, MAYOR'S.

Transferred from general contingent,	\$100 00
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EXPENDED.

Leighton, Emma L., clerical assist- ance,	\$100 00	
Total expended,	\$100 00	\$100 00

ASSESSORS' DEPARTMENT.

Transfers.

Appropriation,	\$50 00
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EXPENDED.

Ford, Mrs. Sarah N., 500 transfers, . . .	\$50 00	
Total expended,	\$50 00	\$50 00

Street Books.

Appropriation,		\$14 00
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EXPENDED.

Dunton & Co., A. W., printing books, . . .	\$14 00	
	\$14 00	\$14 00

Poll Books.

Appropriation,		\$200 00
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EXPENDED.

Dunton & Co., A. W., printing, . . .	\$200 00	
	\$200 00	\$200 00

Collector's Warrant and Cash Book.

Appropriation,		\$20 00
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EXPENDED.

Dunton & Co., A. W., books,	\$20 00	
Total expended,	\$20 00	\$20 00

Carriage Hire.

Appropriation,		\$75 00
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EXPENDED.

Upham, F. R., use of horse and carriage, . . .	\$75 00	
Total expended,	\$75 00	\$75 00

Maine Stock.

Appropriation,		\$8 00
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EXPENDED.

State of Maine, secretary of, copy of abstracts,	\$8 00	
Total expended,	\$8 00	\$8 00

Michigan Stock.

Appropriation,		\$8 00
Balance,	\$8 00	
	\$8 00	\$8 00

CONTINGENT.

Appropriation,	\$175 00	
Transferred from treasury,	50 00	
		\$225 00

EXPENDED.

Bankers & Tradesmen. The, subscrip- tion 1901-2,	\$10 00	
Brock Bros., chimney and shade,	1 55	
Carter Ink Co., The, ink,	62	
Crolly, J. C., cash expenses, sundries, etc.,	67 09	
Dimond & Co., H. C., pad stamps,	1 30	
Dolbeare, H. M., printing blanks and notices,	3 82	
Dunton & Co., A. W., cards and books,	48 25	
Ford, Mrs. S., 434 transfers,	43 40	
Kehoe, Thos., cushion,	4 50	
Orpin Bros., chairs,	18 00	
Page, H. S., labor on safe and locks,	7 35	
Pierce, W. L., posting notices,	1 50	
Potter, S. G., cards, envelopes, etc.,	17 45	
Total expended,	\$224 83	
Balance,	17	
	\$225 00	\$225 00

FIRE DEPARTMENT.

Balance 1900,		\$202 15
Transferred to treasury,	\$202 15	
	\$202 15	\$202 15

Permanent Drivers.

Appropriation,	\$3,120 00
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EXPENDED.

Pay roll,	\$3,120 00	
Total expended,	\$3,120 00	\$3,120 00

Electrician and Driver.

Appropriation,	\$876 00
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EXPENDED.

Pay rolls,	\$876 00	
Total expended,	\$876 00	\$876 00

Engineer for Steamer.

Appropriation,	\$300 00
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EXPENDED.

Pay roll,	\$300 00	
Total expended,	\$300 00	\$300 00

Call Men.

Appropriation,	\$2,750 00
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EXPENDED.

Pay rolls,	\$2,429 19	
Transferred to fire department contin-		
gent,	200 00	
Balance,	120 81	
	\$2,750 00	\$2,750 00

Chief Engineer.

Appropriation,	\$150 00
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EXPENDED.

Pay rolls,	\$150 00	
Total expended,	\$150 00	\$150 00

Assistant Engineers and Clerk.

Appropriation,	\$225 00
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EXPENDED.

Pay rolls,	\$225 00	
Total expended,	\$225 00	\$225 00

House Steward.

Appropriation,	\$40 00
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EXPENDED.

Pay roll,	\$40 00	
Total expended,	\$40 00	\$40 00

Hay, Oats, and Straw.

Appropriation,	\$550 00	
Transferred from treasury,	202 15	
		\$752 15

EXPENDED.

Benson & Co., S. E.,	\$38 73	
Goss, C. B. & F. H.,	629 83	
Total expended,	\$668 56	
Balance,	83 59	
	\$752 15	\$752 15

Coal and Wood.

Appropriation,	\$400 00
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EXPENDED.

Goss, C. B. & F. H.,	\$328 50	
Balance,	71 50	
	\$400 00	\$400 00

Horse Shoeing.

Appropriation,	\$160 00
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EXPENDED.

McCoubry, W. J.,	\$139 75	
McLeod, F. W.,	14 88	
Total expended,	\$154 63	
Balance,	5 37	
	\$160 00	\$160 00

Expressing.

Appropriation,	\$40 00	
Cash refunded,	4 05	
		\$44 05

EXPENDED.

American Express Co.,	\$ 40	
Davis & Twombly,	1 75	
Eastman's Express,	15 64	
Total expended,	\$17 79	
Balance,	26 26	
	\$44 05	\$44 05

Laundry.

Appropriation,	\$50 00
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EXPENDED.

Cutter & Ringer,	\$20 01	
Globe Supply Co.,	10 00	
Newhall, Mrs. M.,	2 70	
Stockwell, Mrs. E. K.,	8 25	
Total expended,	\$40 96	
Balance,	9 04	
	\$50 00	\$50 00

Fire Alarm.

Appropriation,	\$375 00	
Transferred from general contingent,	225 00	
		\$600 00

EXPENDED.

Beattie Zinc Works Co., standard zincs	\$147 50
Burnham, G. E., labor,	12 00
Cramphorn & Co., F. W., wire, etc.,	107 60
Deering & Co., J. P., lumber,	2 18
Edwards, Jos., repairs on tree cutter,	1 45
Goodno, W. A., labor and nails,	5 00
Gordon, C. S., labor,	4 00
King & Co., E. & F., vitriol,	145 17
Malden Electric Co., labor on wires,	1 86

McCruish, Wm., labor,	\$15 00	
McDonald, Peter, labor,	15 00	
Melrose Club Stable, horse and wagon,	78 00	
Page, C. A., labor,	17 00	
Perry, H. J., hardware,	12 99	
Stevens, G. M., battery coppers,	24 00	
Weeks, I., use of wagon,	1 00	
Total expended,	\$589 75	
Balance,	10 25	
	\$600 00	\$600 00

Horse Hire.

Appropriation,	\$200 00
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EXPENDED.

Cheever, Mrs. C. H.,	\$36 00	
Eastman's Express,	5 00	
Keating, P. S.,	36 00	
Lynde, A. W.,	50 00	
Melrose Club Stable,	51 00	
Total expended,	\$178 00	
Balance,	22 00	
	\$200 00	\$200 00

New Hose.

Appropriation,	\$525 00
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EXPENDED.

Globe Newspaper Co., advertising proposals,	\$ 5 00
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Journal Newspaper Co., advertising proposals,	\$8 50	
Callahan, Cornelius, 900 feet 2½ inch,	495 00	
Total expended,	\$508 50	
Balance,	16 50	
	\$525 00	\$525 00

Telephone, Electric and Gas Lights.

Appropriation,	\$260 00
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EXPENDED.

Malden Electric Co.,	\$ 4 10	
Malden & Melrose Gas Light Co.,	97 56	
New England Telephone & Telegraph Co.,	56 46	
Total expended,	\$158 12	
Balance,	101 88	
	\$260 00	\$260 00

Contingent.

Appropriation,	\$300 00	
Transferred from call men,	200 00	
		\$500 00

EXPENDED.

Barnes, H. R., changing collar and spring,	\$5 50
Barrett, W. W., oiling floor and stock,	16 78
Boston Coupling Co., repairs, etc.,	17 80
Brock Bros., repairs and stock,	42 57
Buck & Co., T. H., lumber,	27 44
Bugbee & Barrett, sundries,	6 61
Burrell, Wm. A., sundries,	7 39
Busby & Co., N. I., ladder,	18 00
Butterfield, Sons & Co., W. P., chamois,	5 00

Chesterton & Co., A. W., waste,	\$2 50	
Clement's Emporium, sheets, towels, etc.,	4 15	
Coyle, F. E., hardware and tools,	9 72	
Cross, H. M. & L. W., medicine,	1 00	
Curry, R. H., repairs,	10 05	
Deering & Co., J. P., lumber,	5 04	
Dunton & Co., A. W., printing and typewriting,	15 50	
Edwards, J., repairs, stock and labor,	27 79	
Gibson, Jos., plate glass and setting,	5 75	
Glazier, H. A., rope,	6 00	
Globe Towel Supply Co., washing,	1 00	
Goodno, W. A., labor, carpentry,	27 75	
Holbrook & Norton, sundries,	23 23	
Langiel, W. D., & Co., repairs to harness,	14 85	
Larrabee & Stearns, medicine,	1 65	
Lynn Oil Co., harness oil,	2 75	
Malden Veterinary Hospital, medicine and attendance,	15 00	
Perry, H. J., sundries,	6 90	
Philbrick & Son, A. J., cheese cloth and percaline,	8 83	
Prescott Bros., mop wringer,	2 50	
Robertson, H. S., services, stock and labor,	20 49	
Scrannage Bros., repairing holder,	1 25	
Simpson, H. W., Hose No. 2, steward,	6 66	
Singer, Jr., J., oil and matches,	9 14	
Sunman Chas., repairs,	4 82	
Tyzzar, F. H., repairs and painting,	17 00	
Useful Novelty Co., salt bricks,	2 40	
Wiley & Co., I. H., dusters,	15 14	
Pay roll, forest fires,	42 70	
Total expended,	\$458 65	
Balance,	41 35	
	\$500 00	\$500 00

HEALTH DEPARTMENT.

Collecting Ashes.

Treasurer authorized to borrow, . . . \$700 00

EXPENDED.

Dunton & Co., A. W., ad. and printing,	\$12 00	
Melrose Journal, ad. and printing,	4 00	
Philpot, R., removing ashes, contract,	355 00	
Pierce, W. L., posting notices,	10 50	
Total expended,	\$381 50	
Balance available,	318 50	
	\$700 00	\$700 00

Removal of Garbage.

Appropriation, \$1,200 00

EXPENDED.

Higgins, Thos., R., contract,	\$1,200 00	
Total expended,	\$1,200 00	\$1,200 00

Fumigating and Disinfectant.

Appropriation,	\$150 00	
Cash receipts,	50 00	
		\$200 00

EXPENDED.

Gear, J. F., formaldehyde,	\$29 04	
Kirmes, V. C., fumigating,	199 96	
Total expended,	\$229 00	
Overdraft,		29 00
	\$229 00	\$229 00

Treasurer authorized to borrow, \$50.00.

Salary of Inspector of Plumbing.

Appropriation,	\$650 00
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EXPENDED.

Barker, John T., salary,	\$650 00	
Total expended,	\$650 00	\$650 00

Contingent.

Appropriation,	\$675 82	
Cash, Com. of Mass., refunded,	5 00	
“ licenses,	36 50	
		\$717 32

EXPENDED.

American Express Co., expressage,	\$0 15
Barker, J. T., cash expenses,	4 56
Bent, H. F., services Sweeney case,	10 00
Bird & Co., L. J., book-case,	18 00
Brookline, Town of, cash paid diphtheria case,	330 01
Charity dept., Skering and Sweeney case,	121 46
Crane, C. C., M. D., medical attendance,	18 00
Crane, M. J., nursing,	57 57
Colby, G. A., clerical assistance,	38 00
Dunton & Co., A. W., printing,	9 00
Eastman's express, expressage,	11 70
Fish, E. C., M. D., inspecting school pupils,	26 00
Frost & Hawes, groceries,	22 16
Gear, J. F., tongue depressor,	1 50
Higgins, T. R., removing dead animals,	34 00
Holden, C. P., M. D., cash expenses,	5 19
Hopkins, O. O., signs,	3 00
Jefts, W. A., furniture and bedding,	13 25
Kehoe, T., repairing book-case,	50

Larrabee & Stearns, medicine,	\$5 15	
Mass. Association of Board of Health, annual dues,	4 50	
McLaughlin, F. M., salary as agent,	15 00	
Melrose Journal, advertising and printing,	175 50	
Pierce, W. L., distributing rules and regulations,	25 00	
Potter, S. G., printing, envelopes, etc.,	28 80	
Provandie, P. M. D., medical attend- ance,	45 00	
Reed, F., sundries,	5 77	
Sharples, S. P., testing samples of ice,	5 00	
Snow & Farnham, book,	5 00	
Starbuck, R. M., plumbers' charts,	13 75	
Upham, F. R., cutting ice for tests,	3 00	
Wheaton, H., " " " "	1 25	
York, J. R., removing dead animals,	50	
Total expended,	\$1,057 27	
Overdraft,		\$339 95
	\$1,057 27	\$1,057 27

Treasurer authorized to borrow \$359.70.

INSURANCE.

Balance from 1900,	\$12 97	
Appropriation,	1,648 00	
		\$1,660 97

EXPENDED.

Burrell, W. A.,	\$68 75
Buttrick, S. H.,	92 25
Dearborn, G. H.,	165 00
Folsom, W. N.,	108 75
Gibson, D. E.,	37 50
Hartford Fire Insurance Co.,	60 00

Hartford Steam Boiler Ins. & Isp. Co.,	\$233 75	
Hatch, F. L.,	37 50	
Johnson, H. E.,	180 00	
Kilgore, R. D.,	63 75	
Lovejoy, S. A.,	42 23	
M'Coy, G. M.,	153 00	
Melchert, A. A.,	37 50	
Small & Co., E. S.,	217 50	
Swett, C. C.,	135 00	
Total expended,	\$1,632 48	
Balance,	28 49	
	\$1,660 97	\$1,660 97

INTEREST.

Balance from 1900,	\$5,507 15	
Appropriation,	24,000 00	
		\$29,507 15

RECEIPTS.

Melrose National Bank, deposits,	\$488 16	
Sewer assessments,	1,564 71	
Tax titles,	115 81	
Premiums on notes sold,	81 61	
Tax of 1895,	4 90	
" 1896,	8 06	
" 1897,	9 19	
" 1898,	22 74	
" 1899,	320 08	
" 1900,	3,652 26	
" 1901,	176 62	
		6,444 14
		\$35,951 29

EXPENDED.

Melrose Savings Bank, notes,	\$1,174 38	
Sundry notes,	4,419 22	
Trust funds,	428 33	
Coupons, Central fire station notes,	800 00	
" park loan notes,	540 00	
" school house loan,	6,600 00	
" sewer loan,	14,740 00	
" town hall loan,	1,800 00	
Total expended,	\$30,501 93	
Balance,	5,449 36	
	\$35,951 29	\$35,951 29

MELROSE HOSPITAL.

Appropriation, \$1,000 00

EXPENDED.

Melrose Hospital, board and care,	\$1,000 00	
	\$1,000 00	\$1,000 00

MEMORIAL DAY.

Appropriation, \$200 00

EXPENDED.

Grant, U. S. Post 4, G. A. R.,	\$200 00	
Total expended,	\$200 00	\$200 00

MILITARY AID.

Balance last report, \$55 29

EXPENDED.

Pay rolls,	\$462 46	
Less amount transferred to Commonwealth of Mass.,	231 23	
	<u>\$231 23</u>	
Overdraft,		\$175 94
	<u>\$231 23</u>	<u>\$231 23</u>

POLICE DEPARTMENT.

Balance 1900,	\$ 0 59
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EXPENDED.

Transferred to treasury,	\$ 0 59	
	<u>\$ 0 59</u>	<u>\$ 0 59</u>

Salaries of Chief and Regular Officers.

Appropriation,	\$10,150 00	
Transferred from night watchman,	117 50	
Transferred from contingent,	<u>76 24</u>	\$10,343 73

EXPENDED.

Pay rolls,	\$10,343 73	
Total expended,	<u>\$10,343 73</u>	<u>\$10,343 73</u>

Salaries of Special Officers and Vacations.

Appropriation,	\$700 00	
Transferred from contingent,	<u>36 76</u>	\$736 67

EXPENDED.

Pay rolls,	\$736 76	
Total expended,	<u>\$736 76</u>	<u>\$736 76</u>

Salary of Night Watchman.

Appropriation,	\$500 00
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EXPENDED.

Pay rolls,	\$382 50	
Transferred to salaries of regular officers,	117 50	
	\$500 00	\$500 00

POLICE DEPARTMENT CONTINGENT

Appropriation,	\$550 00
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EXPENDED.

Bent & Bush, gilt lace,	\$ 0 57
Brock Bros., sundries,	3 32
Churchill, Mrs. E. G., services attending female prisoners,	2 00
Clark, J. S., M. D., medical attendance,	1 00
Com. of Mass., revised laws,	6 00
Corbett, P., clipping horse,	3 00
Dewey & Co., F. O., lamps and lanterns,	4 00
Dunton & Co., A. W., printing,	21 00
Eastman's express, expressage,	2 30
Edwards, Jos., iron stakes,	8 00
Flatley, J. C., services stripes on uniforms,	16 00
Hinckley, L. F., crackers,	8 13
Hobbs & Warren Co., Shannon file,	80
Iver Johnson Sporting Goods Co., chain twisters,	4 50
Jack, E. S., M. D., medical attendance,	2 00
Lamson & Hubbard, badges,	2 20
Lane Bros., stock and labor, repairs,	13 23
Langiell & Co., W., D. sundries and repairs,	11 05

Larrabee & Stearns, medicines, . . .	\$2 62	
McCoubry, W. J., horseshoeing, . . .	17 50	
McLaughlin, F. M., cash expenses, . .	15 01	
Melrose Club Stable, board of horse, .	222 25	
Morss, Wm., stock and labor, repairs, .	3 49	
Murphy, Leavens & Co., brushes, . . .	4 95	
N. E. Telephone & Telegraph Co., rentals,	32 61	
Page, H. S., repairing lock,	1 50	
Perry, H. J., hardware,	1 61	
Potter, S. G., printing and sundries, .	8 35	
Shepherdson, A., photos,	3 75	
Smith, W. A., repairing clock,	1 25	
Stoehr & Co., H. C., blanket,	4 90	
Talcott, T. W., cloth for service stripes,	3 00	
Wing, C. Joseph, new tire and repairs, .	3 75	
Total expended,	\$435 64	
Transferred to regular officers,	76 24	
" " special " 	36 76	
Balance,	1 36	
	\$550 00	\$550 00

PUBLIC LIBRARY.

Balance 1900,		\$70 51
Transferred to salaries, new books, etc.,	\$70 51	
	\$70 51	\$70 51

Rent and Heating.

Appropriation,	\$1,225 00
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EXPENDED.

Young Men's Christian Association,		
12 mos.,	\$1,200 00	
Balance,	25 00	
	\$1,225 00	\$1,225 00

Salaries, New Books, Fanitors, Etc.

County treasurer, dog tax, 1900,	\$1,033 60	
Appropriation,	1,775 00	
Transferred from public library, bal-		
ance 1900,	70 51	
		\$2,879 11

EXPENDED.

Balch Bros., books,	\$ 4 00	
Barnard & Co., F. J., rebinding books,	222 10	
Clarke Co., W. B., books,	206 40	
Commandery Loyal Legion, books,	2 00	
DePaw, W. A., books,	13 50	
DeWolfe, Fiske & Co., books,	310 43	
Dunton & Co., A. W., printing,	24 75	
Eastman's Express, expressage,	5 35	
Fells Ice Co., ice,	4 00	
Gordon, F. A., delivering books to sub-		
station,	13 00	
Kelton, E. C., services at sub-station,	45 00	
Lauriat Co., C. E., books,	198 04	
Malden & Melrose Gas Light Co., gas,	86 60	
Marsh, E. B., books and magazines,	151 00	
Mass. Historical society, books,	3 00	
Melrose Journal, printing,	2 50	
Morss, Wm., stock and labor, carpen-		
tering,	50 73	
Nickerson, L., labor on awnings,	4 00	
Parker, A. W., finishing shelves,	3 50	
Patch, C. A., books and cash expenses,	213 89	
Sullivan, J. M., rebinding books,	38 50	
Watson, G., rebinding books,	73 30	
Wilder & Co., L. B., printing,	53 50	
Salaries,	1,090 66	
Total expended,	\$2,819 75	
Balance,	59 36	
	\$2,879 11	\$2,879 11

SALARIES.

Balance, 1900,		\$282 80
Transferred to treasury,	\$266 14	
" " salaries,	16 66	
	\$282 80	\$282 80
Appropriation,	10,150 00	
Transferred from balance 1900,	16 66	
" " treasury,	200 00	
		\$10,336 66

EXPENDED.

Briry, W. S., inspector of milk,	\$100 00
Buttrick, S. H., overseer of poor,	300 00
" " agent military and state aid,	100 00
Cragin, E. L., registrar of voters,	50 00
Crolly, J. C., assessors' clerk,	850 00
Dole, W. H., board of health,	33 33
" " inspector of animals and provisions,	33 33
Edwards, J., assessor, 1 month,	25 00
Franklin, A. B., overseer of poor,	45 84
Gould, E. C., auditor,	500 00
Goodno, W. A., inspector of buildings,	500 00
Holden, C. P., M. D., board of health,	16 66
Hunter, W. D., engineer and superintendent of public works,	2,250 00
Jones, W. DeHaven, city clerk,	1,200 00
" " registrar of voters,	50 00
Kirmes, V. C., registrar of voters,	50 00
Larrabee, J., mayor,	500 00
Lavender, W. R., treasurer,	750 00
Marsh, H. A., registrar of voters,	50 00
Morss, Wm., assessor, 11 months,	275 00
Murray, J. W., collector,	1,000 00
Pierce, W. L., sealer of weights and measures, 13 mos.,	216 66

Provandie, P. H., M. D., board of health,	\$187	50	
Robinson, J. H., board of health,	45	84	
Stantial, Mrs. M. E., overseer of poor,	50	00	
Stevens, W. C., assessor, 10 months,	250	00	
Sturges, F. P., inspector of animals and provisions,	30	81	
Timlin, J. T., board of health,	16	67	
Upham, F. R., assessor, 11 mos.	275	00	
Washburn, F. L., solicitor,	500	00	
	\$10,251	64	
Balance,	115	02	
	\$10,366	66	\$10,366 66

SCHOOL DEPARTMENT.

Teaching and Supervision.

Appropriation, \$55,920 00

EXPENDED.

Pay rolls,	\$55,380	35	
Transferred to books and supplies,	275	00	
Transferred to contingent,	100	00	
Balance,	164	65	
	\$55,920	00	\$55,920 00

Janitors.

Appropriation, \$6,004 00

EXPENDED.

Pay rolls,	\$6,004	00	
	\$6,004	00	\$6,004 00

Books and Supplies.

Appropriation,	\$5,525 00	
Transferred from teaching and super- vision,	275 00	
		\$5,800 00

EXPENDED.

Sundry bills paid,	\$5,799 26	
Balance,	74	
	\$5,800 00	\$5,800 00

Fuel.

Appropriation,	\$5,500 00	
Transferred from contingent,	500 00	
		6,000 00

EXPENDED.

Sundry bills,	\$7,449 89	
Overdraft,		1,449 89
	\$7,449 89	\$7,449 89

Treasurer authorized to borrow \$1,450.00.

Repairs.

Appropriation,	\$2,700 00
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EXPENDED.

Sundry bills paid,	\$3,700 00	
Overdraft,		1,000 00
	\$3,700 00	\$3,700 00

Treasurer authorized to borrow \$1,000.

Furniture.

Appropriation,	\$600 00
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EXPENDED.

Sundry bills paid,	\$599 71	
Balance,	29	
	\$600 00	\$600 00

Transportation of Pupils.

Appropriation,	\$480 00
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EXPENDED.

Sundry bills paid,	\$480 00	
	\$480 00	\$480 00

Printing.

Appropriation,	\$171 00	
Transferred from contingent,	100 00	
Cash refunded,	11 60	
		\$282 60

EXPENDED.

Sundry bills paid,	\$282 55	
Balance,	5	
	\$282 60	\$282 60

High School and Teachers' Library.

Appropriation,	\$100 00
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EXPENDED.

Sundry bills paid,	\$99 76	
Balance,	24	
	\$100 00	\$100 00

Contingent.

Cash received for tuition,	\$1,932 11	
Transferred from teachers and super- visors,	100 00	
		\$2,032 11

EXPENDED.

Sundry bills paid,	\$1,478 62	
Transferred to furniture account,	600 00	
Overdraft,		\$46 51
	\$2,078 62	\$2,078 62
Amount due for tuition, \$394.75.		

SOLDIERS' BURIAL.

EXPENDED.

Churchill, Mr. & Mrs. F. T.,	\$35 00
Gately, J. H.,	35 00
Pierce & Son, A. B.	70 00
Walton, A. J.,	70 00
	\$210 00
Refunded by Commonwealth, Dec., 1902.	

SOLDIERS' RELIEF.

Appropriation,	\$1,250 00	
Transferred from Commonwealth of Mass.,	168 00	
		\$1,418 00
Less overdraft, 1900,		532 15
		\$885 85

EXPENDED.

Allowance, pay roll,	\$287 37
Allen, A. B., rent,	120 00
Benson & Co., S. E., fuel,	41 28
Bugbee & Barrett, food,	73 50
Buttrick, S. H., cash expenses,	3 32
Carothers, W. H., M. D., medical at- tendance,	2 00

Cemetery department, interment and work,	\$12 00
Clark, J. S., M. D., medical attendance,	7 00
Clement's Emporium, dry goods,	10 00
Cross, H. M. & L. W., medicine,	3 00
Dalton, M. J., M. D., medical attendance,	6 00
Fields & Co., H. G., shoes,	1 05
Fish, E. C., M. D., medical attendance,	3 00
Forrest, J., milk,	12 42
Foster, J. T., food,	35 50
Frost & Hawes, food,	117 50
Goss, C. B. & F. H., fuel,	156 96
Hancock, C. F., food,	54 61
Harvey, S. W., rent,	60 00
Hatch, Mrs. M. A., nursing,	18 00
Hellen, S. H., fuel,	13 76
Hinckley, L. F., food,	14 00
Holden, C. P., M. D., medical attendance,	98 00
Hovey, R. C., ether,	1 00
Keen, A. E., food,	2 50
Lander, Gen., Post 5, G. A. R., aid furnished	196 00
Larrabee & Stearns, medicine,	24 90
Marshall, J., fuel,	13 00
McDaniels, J. R., food,	96 00
McLaughlin, F. M., services,	2 00
Melrose Club Stable, carriage,	3 00
Newell & Walker, fuel,	48 66
Newhall & Co., Geo., shoes,	55 35
Pendleton, Mrs. A. J., rent,	69 00
Perley, R. D., M. D., medical attendance,	1 00
Philpot, R., rent,	96 00
Potter, S. G., printing,	5 50
Quincy Market, food,	14 00
Sim, A. S., dry goods,	26 20
Small & Co., E. S., rent,	\$136 00

Stoddard, V. H., food,	\$128 50	
Swett, C. C., rent,	96 00	
Upham, F. R., rent,	47 75	
Wells, W. H., food,	2 00	
Total expended,	\$2,214 63	
Transferred to state aid,	4 00	
Overdraft,		\$1,332 78
	\$2,218 63	\$2,218 63

STATE AID.

Cash returned to treasury, not called for,	\$19 00	
Transferred from soldiers' relief,	4 00	
		\$23 00

EXPENDED.

Pay rolls,	\$2,601 00	
Transferred to Commonw'lth of Mass.,		2,578 00
	\$2,601 00	\$2,601 00

SURETY BONDS.

Appropriation,	\$233 00
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EXPENDED.

Briry, W. S., agent, premium on bonds,	\$231 50	
O'Brien & Russell, premium on bonds,	1 50	
	\$233 00	\$233 00

COUNTY TAXES.

Amount assessed,	\$13,388 55
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EXPENDED.

Paid county treasurer,	13,388 55
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STATE TAX.

Amount assessed, \$7,437 50

EXPENDED.

Paid state treasurer, 7,437 50

METROPOLITAN PARK TAX.

Balance 1900,	\$6,230 65	
Amount assessed 1901,	6,230 90	
		\$12,461 55
Balance,	\$12,461 55	
	\$12,461 55	\$12,461 55

STATE SEWERAGE TAX.

Amount assessed, \$9,727 23

EXPENDED.

Paid state treasurer, 9,727 23

OVERLAYS, ADDITIONALS AND ABATEMENTS.

Taxes of 1895.

Balance, Jan. 31, 1901,	\$3,054 79	
Abated in 1901,	24 70	
		\$3,030 09

Taxes of 1896.

Balance, Jan. 31, 1901,	\$1,905 70	
Abated in 1901,	84 58	
		1,821 12

Taxes, of 1897.

Balance, Jan. 31, 1901,	\$1,934 23	
Abated in 1901,	118 82	
		\$1,815 41

Taxes of 1898.

Balance, Jan. 31, 1901,	\$869 76	
Abated in 1901,	532 66	
		337 10
		\$7,003 72

Taxes of 1899.

Balance, Jan. 31, 1901,	\$453 79	
Additional,	13 47	
	\$467 26	
Abated in 1901,	\$1,001 75	
Less overdraft,		534 49
		\$6,469 23
Transferred to refunded taxes,		20 51
Balance,		\$6,448 72

Taxes of 1900.

Balance, Jan. 31, 1901,	\$1,781 84	
Additional,	442 50	
	\$2,224 34	
Abated in 1901,	1,435 12	
		\$789 22

Taxes of 1901.

Overlay,	\$5,232 39	
Additional,	730 62	
	\$5,963 01	

Abated in 1901,	\$4,242 95	
		\$1,720 06
Balance to 1902,		\$8,958 00

DEFICIENCIES OF JANUARY, 1900.

Appropriation,	\$3,153 00	
Commonwealth of Mass., bank and corporation tax,	12,101 27	
		\$15,254 27

EXPENDED.

National Bank tax,	\$769 54	
Deficiencies 1900,	15,885 96	
Balance to 1902,		1,401 23
	\$16,655 50	\$16,655 50

SCHOOL HOUSE LOAN SINKING FUND.

Appropriation,	\$5,000 00
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EXPENDED.

School House Loan Sinking Fund Commissioners,	\$5,000 00	
	\$5,000 00	\$5,000 00

WATER LOAN SINKING FUND.

Transferred from water fund,	\$5,958 12
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EXPENDED.

Water Loan Sinking Fund Commis- sioners	\$5 958 12	
	\$5,958 12	\$5,958 12

PUBLIC WORKS DEPARTMENT.

Parks.

Balance, 1900,	.	.	.	.	.	\$118 28
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EXPENDED.

Transferred to treasury,	.	.	.	.	\$118 28	
					<u>\$118 28</u>	<u>\$118 28</u>

Parks.

Appropriation,	.	.	.	.	\$200 00	
Cash receipts,	.	.	.	.	1 00	
					<u>1 00</u>	<u>\$201 00</u>

EXPENDED.

See superintendent of public works'						
report for details,	.	.	.	.	\$113 16	
Balance,	.	.	.	.	87 84	
					<u>87 84</u>	<u>\$201 00</u>
					\$201 00	\$201 00

Engineering Department.

Balance from 1900,	.	.	.	.	\$205 00
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EXPENDED.

Transferred to treasury,	.	.	.	.	\$205 00	
					<u>\$205 00</u>	<u>\$205 00</u>

Salaries.

Appropriation,	.	.	.	.	\$1,800 00	
Transferred from water fund,	.	.	.	.	1,000 00	
					<u>1,000 00</u>	<u>\$2,800 00</u>

EXPENDED.

See superintendent of public works' report for details,	\$2,699 73	
Transferred to supplies and incidentals,	90 77	
	\$2,790 50	
Balance,	9 50	
	\$2,800 00	\$2,800 00

Supplies and Incidentals.

Appropriation,	\$200 00	
Transfer from salaries,	90 77	
Cash receipts,	1 05	
		\$291 82

EXPENDED.

See superintendent of public works' report for details,	\$233 09	
Balance,	58 73	
	\$291 82	\$291 82

Public Works Office.

Balance, 1900,	\$12 60
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EXPENDED.

Transferred to treasury,	\$12 60	
	\$12 60	\$12 60

Clerk and Stenographer.

Appropriation,	\$500 00
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EXPENDED.

See superintendent of public works' report for details,	\$490 50	
Balance,	9 50	
	\$500 00	\$500 00

Telephone Service.

Appropriation,		\$75 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$66 67	
Balance,	8 33	
	\$75 00	\$75 00

Books, Printing, Stationery, Etc.

Appropriation,	\$300 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$299 58	
Balance,	42 00	
	\$300 00	\$300 00

City Hall.

Balance, 1900,	\$40 97
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EXPENDED.

Transferred to treasury,	\$40 97	
	\$40 97	\$40 97

Fanitors.

Appropriation,	\$750 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$725 28	
Balance,	24 72	
	\$750 00	\$750 00

Heating.

Appropriation,		\$275 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$274 50	
Balance,	50	
	\$275 00	\$275 00

Lighting.

Appropriation,		\$775 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$752 23	
Balance,	22 77	
	\$775 00	\$775 00

Contingent.

Appropriation,		\$300 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$299 92	
Balance,	08	
	\$300 00	\$300 00

Highway Division.

Balance, 1900,		\$588 14
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EXPENDED.

Transferred to treasury,	\$588 14	
	\$588 14	\$588 14

Trimming Trees and Care of.

Appropriation,	\$100 00	
Transferred from general repairs and maintenance,	<u>1 56</u>	\$101 56

EXPENDED.

See superintendent of public works' report for details,	\$67 70	
Transferred to general repairs and maintenance,	<u>33 86</u>	
	\$101 56	\$101 56

Catch Basins and Drains.

Appropriation,	\$2,000 00
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EXPENDED.

See superintendent of public works' report for details,	\$1,954 85	
Transferred to general repairs and maintenance,	<u>45 15</u>	
	\$2,000 00	\$2,000 00

Bridges and Culverts.

Appropriation,	\$1,000 00	
Cash receipts, general repairs and maintenance,	127 56	
Transferred from general repairs and maintenance,	<u>48</u>	\$1,128 04

EXPENDED.

See superintendent of public works' report for details,	\$1,043 88	
Transferred to general repairs and maintenance,	<u>84 16</u>	
	\$1,128 04	\$1,128 04

Paving Gutters.

Appropriation,	\$500 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$500 00	
	\$500 00	\$500 00

Removing Snow and Sanding Walks.

Appropriation,	\$1,500 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$1,500 00	
	\$1,500 00	\$1,500 00

Clearing Crossings.

Appropriation,	\$1,000 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$1,000 00	
	\$1,000 00	\$1,000 00

General Repairs and Maintenance.

Appropriation,	\$13,900 00
Cash, excise tax, street railways,	1,657 56
" proceeds of loan,	5,000 00
" W. D. Hunter,	1,023 77
" Sundry bills from sundry divisions,	595 79
Transfer from sundry divisions,	163 17
	\$22,340 29

EXPENDED.

See superintendent of public works'

report for details,	\$21,696 51	
Transferred to surface drainage,	639 19	
" " trimming trees,	1 56	
" " bridges and culverts,	48	
Balance,	2 55	
	\$22,340 29	\$22,340 29

Paving Park Street.

Proceeds of loan, \$500 00

EXPENDED.

See superintendent of public works'

report for details,	\$500 00	
	\$500 00	\$500 00

Stone Bounds.

Transferred from treasury, \$350 00

EXPENDED.

Hoffman, C. L., concreting around stones	\$1 73	
Newhall, F. E., 200 stones, drilled,	110 00	
Taylor, G. H., pig lead,	1 05	
Pay rolls,	122 98	
	\$235 76	
Balance,	114 24	
	\$350 00	\$350 00

SEWER DIVISION.

Construction.

Balance, 1900,	\$477 79	
Appropriation,	925 00	
Cash, W. D. Hunter,	236 75	
" Sundry bills, sundry divisions, . .	4,362 49	
Transfer from sundry divisions, . . .	71 31	
Transfer from sewer assessments, collected,	10,808 52	
		\$16,881 86

EXPENDED.

See superintendent of public works' report for details,	\$13,890 25	
Balance,	2,991 61	
	\$16,881 86	\$16,881 86

Due this account from sewer assessments to be collected, \$4,191.48.

Private Sewers.

Cash receipts,	\$2,919 60
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EXPENDED.

See superintendent of public works' report for details,	\$2,838 94	
Balance,	80 66	
	\$2,919 60	\$2,919 60

One Half Rent of Yard.

Appropriation,	\$175 00
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EXPENDED.

Benson, S. E., rent,	\$175 00	
	\$175 00	\$175 00

Maintenance.

Appropriation,	\$800 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$390 68	
Transferred to construction,	71 31	
	\$461 99	
Balance,	338 01	
	\$800 00	\$800 00

Contingent.

Appropriation,	\$100 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$96 85	
Balance,	3 15	
	\$100 00	\$100 00

Sidewalks.

Balance, 1900,	\$179 83
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EXPENDED.

Transferred to treasury,	\$179 83	
	\$179 83	\$179 83

Repairs to Present Walks.

Appropriation,	\$500 00	
Proceeds of loan,	500 00	
Cash receipts,	163 44	
		\$1,163 44

EXPENDED.

See superintendent of public works'		
report for details,	\$1,356 78	
Overdraft,		\$193 34
	\$1,356 78	\$1,356 78
Treasurer authorized to borrow \$300.00.		

New Individual Walks.

Appropriation,	\$700 00	
Proceeds of loan,	1,000 00	
Cash receipts,	1,165 63	
		\$2,865 63

EXPENDED.

See superintendent of public works'		
report for details,	\$2,715 75	
Balance,	149 88	
	\$2,865 63	\$2,865 63
Treasurer authorized to borrow \$500.00.		

Complete Continuous Walks Begun.

Appropriation,	\$800 00
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EXPENDED.

See superintendent of public works'		
report for details,	\$653 79	
Transferred to treasury,	146 21	
	\$800 00	\$800 00

New Continuous Walks.

Appropriation,	\$1,000 00	
Proceeds of loan,	500 00	
		\$1,500 00

EXPENDED.

See superintendent of public works'

report for details, . . . \$1,425 55

Balance, . . . 74 45

\$1,500 00 \$1,500 00
Edgestones, Main Street, Foster to Grove.

Transferred from treasury, . . . \$669 00

Balance, . . . \$669 00

\$669 00 \$669 00
Street Lights.

Balance, 1900, . . . \$25 62

Appropriation, . . . 11,000 00

\$11,025 62

EXPENDED.

See superintendent of public works'

report for details, . . . \$11,966 09

Transferred to treasury, . . . 25 62

Overdraft, . . . 966 09

\$11,991 71 \$11,991 71

Treasurer authorized to borrow \$1,025.00.

Street Sprinkling.

Cash receipts, . . . \$3,541 21

Less overdraft, 1900, . . . 1,900 06

\$1,641 15

EXPENDED.

See superintendent of public works'

report for details, . . . \$3,542 51

Overdraft, . . . 1,901 36

\$3,542 51 \$3,542 51

Surface Drainage.

Proceeds from loans,	\$10,000 00	
Cash receipts,	329 49	
Transferred from Highways, general repairs and maintenance,	639 19	
		\$10,968 68

EXPENDED.

See superintendent of public works' report for details,	\$11,204 37	
Overdraft,		235 69
	\$11,204 37	\$11,204 37
Treasurer authorized to borrow \$750.00.		

WATER DIVISION.

Water Fund.

Balance, 1900,	\$11,688 90	
Cash receipts,	49,138 85	
Transferred from sundry divisions, . .	5,015 60	
		\$65,843 35

EXPENDED.

See superintendent of public works' report for details,	\$21,696 32	
Transferred to water loan sinking fund, .	5,958 12	
“ “ sundry divisions,	31,015 60	
	\$58,670 04	
Balance,	7,173 31	
	\$65,843 35	\$65,843 35

Water Construction.

Cash receipts,	\$67 93	
Transferred from water fund,	3,000 00	
" " " relays,	550 00	
		\$3,617 93

EXPENDED.

See superintendent of public works' report for details,	\$3,590 15	
Balance,	27 78	
	\$3,617 93	\$3,617 93

Water Maintenance.

Cash receipts,	\$5,871 54	
Transferred from water fund,	7,000 00	
" " " relays,	3,556 68	
		\$16,428 22

EXPENDED.

See superintendent of public works' report for details,	\$16,316 86	
Balance,	111 36	
	\$16,428 22	\$16,428 22

Relaying Pipes.

Cash receipts,	\$3,488 24	
Transferred from water fund,	15,000 00	
		\$18,488 24

EXPENDED.

See superintendent of public works' report for details,	\$14,381 56	
Transferred to construction,	550 00	
Transferred to maintenance,	3,556 68	
	\$18,488 24	\$18,488 24

City Hall Improvement.

Proceeds of loan,	\$5,500 00	
Transferred from treasury,	300 00	
		\$5,800 00

EXPENDED.

See superintendent of public works'		
report for details,	\$4,255 40	
Balance,	1,544 60	
	\$5,800 00	\$5,800 00

Ell Pond Park.

Balance, 1900,	\$936 57
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EXPENDED.

Boardman, G. F., judgment,	\$597 82	
Green, Eliza, judgment,	1,550 00	
Overdraft,		1,211 25
	\$2,147 82	\$2,147 82

FOURTH OF JULY CELEBRATION.

Transferred from treasury,	\$350 00
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EXPENDED.

Boston Regalia Co., badges,	\$ 9 30
Deering & Co., J. P., lumber,	6 06
Dunton & Co., A. W., printing,	1 75
Gibbons, R., stock and labor,	3 00
Goodno, W. A., erecting band stand, . .	22 80
Harriot, J., medals,	10 00
Keating, J. J., cash expenses,	1 83
Masten & Wells Fireworks Mfg., Co., flags,	5 00

Philpot, R., teaming band stand, . . .	\$2 25	
Pray, M. J., dinners for band, . . .	22 00	
Shepard Mfg. Co., prizes, . . .	37 50	
Smith, W. A., prize cup, . . .	8 25	
State military band, services, . . .	154 26	
Wallace, C. M., children's entertain- ment,	50 00	
Pay roll,	16 00	
Total expended,	\$350 00	\$350 00

PRINTING TOWN REPORT.

Dunton & Co., A. W., printing, . . .	\$212 00	
Overdraft,		\$212 00
	\$212 00	\$212 00

SEWER ASSESSMENTS.

Balance, 1900,	\$36,521 65	
Collected,	12,373 23	
		\$48,894 88

EXPENDED.

Transferred to sewer construction, . . .	\$10,808 52	
" " interest,	1,564 71	
Paid to sewer loan sinking fund com- missioners,	36,521 65	
	\$48,894 88	\$48,894 88

CEMETERY TRUST FUNDS.

Balance, 1900,	\$6,462 50
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RECEIPTS.

Backer, Mrs. H. E.,	\$150 00	
Bowers, Wm. F. R.,	100 00	
Chapin, C. N.,	165 00	
Cobb, H.,	50 00	
Hunt, Mrs. S. H.,	100 00	
Jenkins, O.,	100 00	
Orcutt, W. A.,	100 00	
Shapleigh, Mrs. E.,	100 00	
Woods, Mrs. J. M.,	100 00	
		\$965 00
		\$7,427 50
Balance to 1902,	\$7,427 50	
	\$7,427 50	\$7,427 50

E. TOOTHAKER FUND.

Balance, 1900,	\$1,582 11	
City treasurer, interest on trust,	123 16	
		\$1,705 27

EXPENDED.

Allowance, pay roll,	\$26 80
Benson & Co., S. E., fuel	3 25
Briry, W. S., medicine,	1 80
Brown, Eliza, food,	4 70
Bugbee & Barrett, food,	7 50
Churchill, Mr. and Mrs. F. T., under- taker's services,	35 00
Cross, H. M. & L. W., medicine	5 60
Fields & Co., H. G., shoes,	2 00
Frost & Hawes, food,	26 00
Goss, C. B. & F. H., fuel,	34 14
Harvey, S. W., undertaker's services,	15 00
Hinckley, L. F., food,	2 50
Holbrook & Norton, food,	2 00

Holden, C. P., M. D., medical attendance,	\$18 00	
Hovey, R. C., medicine,	90	
Howes, J. C., estate, rent,	10 00	
Jackson, W. P., rent,	16 00	
Larrabee & Stearns, medicine,	11 05	
Newell & Walker, fuel,	14 86	
Newhall & Co., G., shoes, :	5 75	
Philpot, R., fuel,	5 00	
Small & Co., E. S., rent,	37 50	
	\$285 35	
Balance,	1,419 92	
	\$1,705 27	\$1,705 27

TAXES.

1895.

Balance uncollected, Jan. 31, 1901,	\$31 54	
Interest,	4 90	
	\$36 44	
Abated in 1901,	24 70	
	\$11 74	
Collected and paid treasurer,	11 74	

1896.

Balance uncollected, Jan. 31, 1901,	\$106 71	
Interest,	8 06	
	\$114 77	
Abated in 1901,	84 58	
	\$30 19	
Collected and paid treasurer,	30 19	

1897.

Balance uncollected, Jan. 31, 1901,	\$144 39
Interest,	9 19
	\$153 58
Abated in 1901,	118 82
	\$34 76
Collected and paid treasurer,	34 76

1898.

Balance uncollected, Jan. 31, 1901,	\$714 61
Interest,	22 74
	\$737 35
Abated in 1901,	532 66
	\$204 69
Collected and paid treasurer,	194 86
Balance uncollected, Jan. 31, 1902,	\$9 83

1899.

Balance uncollected, Jan. 31, 1901,	\$3,926 55
Additional,	13 47
Interest,	320 08
	\$4,260 10
Abated in 1901,	1,001 75
	\$3,258 35
Collected and paid treasurer,	2,486 21
Balance uncollected, Jan. 31, 1902,	\$772 14

1900.

Balance uncollected, Jan. 31, 1901, . . .	\$104,736 23
Additional,	442 50
Interest,	3,652 26
	\$108,830 99
Abated in 1901,	1,435 12
	\$107,395 87
Collected and paid treasurer,	98,726 65
Balance uncollected, Jan. 31, 1902, . . .	\$8,669 22

1901.

Warrant,	\$248,652 39
Additional,	730 62
Interest,	176 62
	\$249,559 63
Abated in 1901,	4,242 95
	\$245,316 68
Collected and paid treasurer,	\$139,530 12
Balance uncollected, Jan. 31, 1902, . . .	\$105,786 56
Total uncollected,	\$115,237 75

Refunded Taxes.

Transferred from overlays, . . .	\$20 51
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EXPENDED.

Welsh, Willard, illegal assessment, . . .	\$20 51	
Total expended,	\$20 51	\$20 51

Tax Title Takings.

Balance unredeemed, Jan. 31, 1901,	\$3,553 20
Paid collector,	5,101 15
Paid registrar of deeds, recording,	266 75
	\$8,921 10
Cash received, titles redeemed,	1,561 91
Total amount unredeemed, Jan. 31, 1902,	\$7,359 19

LOANS, MUNICIPAL AND PERMANENT.

Balance, January 31, 1901,	\$61,000 00
Cash received for notes,	44,000 00
	\$105,000 00

EXPENDED.

Paid sundry notes,	\$20,000 00
Balance to 1902, see treasurer's re- port for details,	85,000 00
	\$105,000 00
	\$105,000 00

LOANS, TEMPORARY.

Balance, January 31, 1901,	\$ 64,600 00
Cash received for notes,	144,121 65
	\$208,721 65

EXPENDED.

Paid sundry notes,	\$105,600 00
Balance to 1902, see treasurer's re- port for details,	103,121 65
	\$208,721 65
	\$208,721 65

SCHEDULE OF CITY PROPERTY.

FIRE DEPARTMENT.

Central fire station, on city hall lot,	\$20,000 00	
Personal property, Steamer No. 1,		
schedule on file,	5,659 00	
Personal property, Hook and Ladder,		
schedule on file,	2,524 75	
Personal property, Hose No. 2, sched-		
ule on file,	1,455 50	
		\$29,639 25

Hose No. 3.

Building,	\$1,200 00	
10,267 square feet land,	3,075 00	
Personal property, schedule on file,	1,734 00	
		6,009 00

Hose No. 4.

Building,	\$1,800 00	
5,625 square feet land,	550 00	
Personal property, schedule on file,	1,344 30	
		3,694 30
Fire alarm, schedule on file,		13,637 80
		\$52,980 35

POLICE DEPARTMENT.

Personal property, schedule on file,	817 50
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CHARITY DEPARTMENT.

Personal property, schedule on file,	1,022 18
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PUBLIC LIBRARY.

Personal property, schedule on file,	\$12,000 00
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SCHOOL DEPARTMENT.

Converse school building, . . .	\$5,000 00	
21,017 square feet land, . . .	1,050 00	
Personal property, . . .	179 00	
		\$6,229 00
Franklin school building, . . .	\$30,000 00	
21,752 square feet land, . . .	6,575 00	
Personal property, . . .	4,129 00	
		40,704 00
Gooch school building, . . .	\$25,000 00	
27,815 square feet land, . . .	4,450 00	
Personal property, . . .	2,598 00	
		32,048 00
High school building, . . .	\$100,000 00	
116,385 square feet land, . . .	58,200 00	
Personal property, . . .	20,215 00	
		178,415 00
Lincoln school building, . . .	\$30,000 00	
27,604 square feet land, . . .	6,900 00	
Personal property, . . .	3,707 00	
		40,607 00
Livermore school building, . . .	\$12,000 00	
22,555 square feet land, . . .	6,650 00	
Personal property, . . .	948 00	
		19,598 00
Mann, Horace school building, . . .	\$20,000 00	
26,361 square feet land, . . .	4,475 00	
Personal property, . . .	1,528 00	
		26,003 00
Ripley school building, . . .	\$2,200 00	
14,748 square feet land, . . .	575 00	
Personal property, . . .	59 00	
		2,834 00
Sewall school building, . . .	\$8,000 00	
14,567 square feet land, . . .	7,375 00	
Personal property, . . .	564 00	
		15,939 00

Warren, Joseph school building, . . .	\$14,000 00	
18,572 square feet land,	2,300 00	
Personal property,	841 00	
		17,141 00
Washington school building,	\$30,000 00	
30,794 square feet land,	4,000 00	
Personal property,	4,671 00	
		38,671 00
West Side school building,	\$1,000 00	
11,800 square feet land,	3,325 00	
		4,325 00
Whittier school building,	\$7,500 00	
15,000 square feet land,	3,000 00	
Personal property,	382 00	
		10,882 00
Winthrop school building,	\$11,000 00	
26,544 square feet land,	1,600 00	
Personal property,	829 00	
		13,429 00
		\$446,825 00

SUNDRIES.

Old school building, Chestnut street, . . .	\$ 500 00	
12,000 square feet land,	2,400 00	
		\$2,900 00
Old school building, Green street, . . .	\$1,000 00	
24,500 square feet land,	3,600 00	
		4,600 00
Old school building, Upham street, . . .	\$600 00	
11,400 square feet land,	675 00	
		1,275 00
		\$8,775 00

WYOMING CEMETERY.

Buildings,	\$2,000 00	
47¾ acres land,	30,000 00	
Water system,	950 00	
Personal property,	183 00	
		\$33,133 00

PUBLIC WORKS DEPARTMENT.

City hall building,	\$65,000 00
44,934 sq. ft. land,	67,400 00
Furniture, fixtures and sundries, schedule on file,	7,963 40
	\$140,363 40

Highway Division.

Crusher lot, Maple street, 49,015 sq. ft. land,	\$1,000 00
Crusher lot, Linwood ave., 132,877 sq. ft. land,	3,200 00
Stone crusher plant, tools, etc.,	4,800 00
Road-rollers, scrapers, plows, sprink- ling carts, etc.,	3,217 50
Horses, carts, harnesses, tools, etc.,	1,826 00
Stock, crusher,	752 30
Stock, yard,	322 26
	\$15,180 06

Public Parks.

Ell Pond park,	\$15,000 00
Building, 105 Tremont street,	600 00
Old high school lot, Emerson street, 30,300 sq. ft. land,	10,600 00
Melrose common, 4 35-100 acres,	10,000 00
Sewall Woods park, 9 acres and 10,000 ft.,	11,250 00
Strip east side Ell pond,	1,000 00
Lot, Main and Green street, 5,000 sq. ft.,	500 00
Lot, Main and Lynde street, 5,000 sq. ft.,	1,250 00
Settees,	25 00
	\$50,225 00

Sewer Division.

Sewer system, cost of construction, \$366,462 89	
Personal property,	1,354 02
	367,816 91

Water Division.

Water system, cost of construction, \$425,895	51
Personal property,	12,606 89
	438,502 40

Surface Drainage.

Cost of construction,	14,748 46
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RECAPITULATION.

Charity department,	\$1,022 18
Fire department,	52,980 35
Police department,	817 50
Public library,	12,000 00
School department,	446,825 00
Sundries,	8,775 00
Wyoming cemetery,	33,133 00
City hall,	140,363 40
Highways,	15,118 06
Parks,	50,225 00
Sewer division,	367,816 91
Water division,	438,502 40
Surface drainage,	14,748 46
	\$1,582,327 26

BOARD OF HEALTH REPORT.

March 10, 1902.

To the Honorable, the Mayor, City of Melrose, Mass.:

SIR:—As the board of health we have the honor to present our report upon the health department for the year 1901. The members of the board of health for the year were Paul H. Provandie, Joseph H. Robinson and John T. Timlin. The board appointed Miss Grace A. Colby clerk and Walter DeHaven Jones and F. M. McLaughlin agents. Victor C. Kirmes was made disinfecter, and John T. Barker served as inspector of plumbing and as a voluntary sanitary inspector. An amendment of the ordinances placed the inspector of milk and vinegar, Wm. S. Briry, also the inspector of cattle and provisions and food products, Wm. H. Dole, in charge of this department. By vote of the honorable board of aldermen, all police officers of the city were made sanitary inspectors to discharge such duties as the board might prescribe and to serve without compensation.

We have held weekly meetings throughout the year on Tuesday evenings, besides many special meetings.

MORTALITY STATISTICS.

Return of Deaths.

The return of deaths made by the physicians is very satisfactory. Generally speaking careful diagnoses are given. In some cases however the diagnosis is poorly stated and cannot be classified. For this reason it is placed under the head of ill defined causes. Hereafter the board will not accept an ill defined cause and will refer such a death certificate to the physician for additional information.

REPORT OF DEATHS AND CONTAGIOUS DISEASES.

MONTH OF JANUARY, 1901.

Population 12,962.

Number of Deaths for January, 1900, 23; for January, 1901, 18.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Cardiac diseases.....	..	..	2	3	..	..	..	1	..	1	..	..	1	2	..	5
Cancer of aesophegus.....	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Tumor of brain.....	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Diphtheria.....	..	..	2	..	..	2	..	..	..	..	..	..	..	..	..	2
Bronchitis, acute.....	..	1	1	..	..	1	..	..	..	..	..	..	..	1	..	2
Pneumonia.....	..	1	1	..	..	..	..	..	1	..	..	..	1	..	..	2
Myelitis, chronic.....	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1
Diabetis, mellitus.....	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Diarrhoea.....	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
La grippe.....	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1
Old age.....	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
Total.....		10	8		2	1	1		2	1		4	4	3	18	

Nativity of Deceased—United States, 17; Ireland, 1.

Place of Burial—Wyoming, 11; Other places, 7.

MONTH OF FEBRUARY, 1901.

Number of Deaths for February, 1900, 15; for February, 1901, 13.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Pneumothorax.....	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Apoplexy.....	..	2	1	..	..	..	..	..	..	..	..	..	1	1	1	3
Cerebral Hemorrhage.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Tuberculosis, general.....	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Laryngitis Croupus.....	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Ill Defined.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Paralysis.....	..	1	1	..	..	..	..	..	..	..	..	1	..	1	..	2
Cardiac disease.....	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1
La Grippe.....	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Meningitis.....	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1
Total.....		10	3	2								2	2	2	5	13

Nativity of Deceased—United States, 10; England, 1; Ireland, 1; Nova Scotia, 1.

Place of Burial—Wyoming, 7; Other places, 6.

REPORT OF DEATHS AND CONTAGIOUS DISEASES.—*Continued.*

MONTH OF MARCH, 1901.

Number of Deaths for March, 1900, 30; for March, 1901, 13.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Appendicitis and Septic Peritonitis	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	1
Catarrh of Bowels	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
Heart, Diseases of	3	..	3	..	..	..	..	..	..	..	1	..	..	..	2	3
La Grippe	2	..	1	1	..	..	..	..	..	..	..	..	..	2	..	12
Rheumatism	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
Tuberculosis, Pulmonary....	4	..	2	2	..	..	..	1	..	1	..	2	..	..	..	4
Typhoid Fever	1	..	..	1	..	..	..	1	..	..	..	..	..	..	..	1
Totals	13	..	8	5	..	..	..	2	..	1	2	2	..	3	3	13

Nativity of Deceased—United States, 8; Ireland, 2; England, 2; New Brunswick, 1.

Places of Burial—Melrose, 6; Other Places, 7.

MONTH OF APRIL, 1901.

Number of Deaths for April, 1900, 24; for April, 1901, 18.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Bright's Disease	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1
Bronchitis	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1
Carcinoma Uterus	1	..	..	1	..	..	..	..	..	1	..	..	1	..	..	1
Cerebral Hemorrhage	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Carbuncle	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	1
Dermoid Cyst, Shock	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Diphtheria	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	1
Duodenal Ulcer	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1
Injury, Spine	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	1
Inanition	2	..	1	1	2	..	..	..	..	..	..	..	..	..	..	2
Ill Defined	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1
Spina Bifida	1	..	1	4	1	..	..	..	..	..	..	..	..	..	..	1
Tuberculosis, Pulmonary	3	1	..	1	..	..	..	1	2	..	1	1	..	..	..	5
Total	16	1	8	10	5	1	..	1	1	3	2	1	2	1	1	18

Nativity of Deceased—United States, 16; Germany, 2.

Places of Burial—Melrose, 7; Other places, 11.

REPORT OF DEATHS AND CONTAGIOUS DISEASES.—Continued.

MONTH OF MAY, 1901.

Number of Deaths for May, 1900, 16; for May, 1901, 14.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Appendicitis, operation.....	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	1
Cardiac disease, Bronchitis..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1
Carcinoma, Liver.....	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1
Cerebral Hemorrhage.....	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1
Congestion, Lungs.....	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Empyema, Shock.....	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	1
Epilepsy, Coma.....	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	1
Ill Defined.....	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1
Peritonitis, Acute General...	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	1
Pneumonia.....	2	..	2	..	..	..	..	..	..	..	1	..	..	..	1	2
Premature Birth.....	2	..	1	1	2	..	..	..	..	..	..	..	..	..	..	2
Typhoid Fever.....	1	..	..	1	..	..	..	1	..	..	..	..	..	..	..	1
Totals.....	15	..	9	5	3	..	..	1	2	..	2	1	3	2	14	

Nativity of Deceased—United States, 10; Ireland, 2; Nova Scotia, 1; New Brunswick, 1.

Places of Burial—Melrose, 6; Other places, 8.

MONTH OF JUNE, 1901.

Number of Deaths for June, 1900, 10; for June, 1901, 6.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Asthenia.....	1	..	..	1	1	..	..	..	..	..	..	..	1	..	..	1
Anæmia Pernicious.....	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Brain Tumor.....	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	1
Cholelithiasis Operation....	1	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1
Nephritis Parenchymatous...	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1
Tuberculosis Pulmonalis....	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1
Total.....	6	..	1	5	1	..	..	..	1	1	1	2	..	..	..	6

Nativity of Deceased—United States, 6.

Places of Burial—Melrose, 4; Other places, 2.

REPORT OF DEATHS AND CONTAGIOUS DISEASES.—*Continued.*

MONTH OF JULY, 1901.

Number of Deaths for July, 1900, 15; for July, 1901, 10.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Septicæmia	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1
Pernicious Anæmia	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	1
Senility	2	..	..	2	..	..	..	..	..	..	..	..	..	..	2	2
Unknown	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1
Cerebral Embolism	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1
Tumor of Brain	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	1
Consumption	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1
Senile Gangrene	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1
Still Born	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1
Totals	7	5	5	1	..	..	..	..	2	1	1	..	2	3	10	10

Nativity of Deceased—United States, 6; Nova Scotia, 1; Prince Edward Island, 1; Maine, 1; New Brunswick, 1.

Place of Burial—Wyoming, 8; Other places, 2.

MONTH OF AUGUST, 1901.

Number of Deaths for August, 1900, 12; for August, 1901, 18.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Dysentery	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1
Cancer	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1
Meningitis	1	..	1	2	..	1	..	..	..	..	..	..	..	..	..	3
Epilepsy	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	1
Old Age	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
Fatty Heart	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	1
Cerebro Spinal Meningitis...	1	..	2	..	1	..	..	..	..	..	..	..	1	..	..	2
Paralysis	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Cardiac Disease ..	..	..	1	1	1	..	..	..	..	..	..	..	1	..	..	2
Cholera Infantum	1	..	..	2	2	..	..	..	..	..	..	..	..	..	..	2
Tuberculosis Pulmonalis...	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1
Still Born	1	..	..	1	1	..	..	..	1	..	..	..	..	..	..	1
Cancer Stomach	1	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1
Totals	7	6	12	7	7	1	..	1	1	2	..	3	1	2	18	18

Nativity of Deceased—United States, 13; New Brunswick, 1; Nova Scotia, 2; Scotland, 1.

Place of Burial—Wyoming, 10; Other places, 8.

REPORT OF DEATHS AND CONTAGIOUS DISEASES.—*Continued.*

MONTH OF SEPTEMBER, 1901.

Number of Deaths for September, 1900, 19; for September, 1901, 9.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.								Totals.		
					1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.		70 to 80 years.	Over 80 years.
Paralysis	..	..	2	..	..	..	..	..	..	..	..	..	1	1	2
Tuberculosis Pulmonalis....	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1
Cancer	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1
Cardiac Disease.....	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
Cholera Infantum.....	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1
Meningitis	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1
Marasmus	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1
Cerebral Hemorrhage.	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1
Totals	..	..	5	4	3	..	..	..	..	2	2	1	1	..	9

Nativity of Deceased—United States, 9.

Place of Burial—Wyoming, 4; Other places, 5.

MONTH OF OCTOBER, 1901.

Number of Deaths for October, 1900, 20; for October, 1901, 22.

Cause of Death.	White.	Colored.	1 year and under.											Totals.
			Male.	Female.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	
Cancer	..	..	..	1	..	..	..	..	..	..	..	..	1	1
Meningitis	..	..	..	2	1	1	..	..	..	..	..	..	..	2
Marasmus	..	1	2	3	..	..	..	..	..	..	..	..	..	3
Cardiac Disease.....	..	..	..	2	..	..	..	..	..	..	1	1	..	2
Still Born.....	..	1	2	3	..	..	..	..	..	..	..	..	..	3
Paralysis (fracture).....	..	1	..	1	..	..	..	..	..	1	..	..	..	1
Pneumonia	..	1	1	1	1	..	..	..	..	..	1	..	..	2
Senility	..	..	..	1	..	..	..	..	..	..	..	1	..	1
Tuberculosis	..	..	1	1	..	..	..	..	..	1	..	..	..	1
Bright's Disease.....	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Entero Colitis	..	..	1	1	1	..	..	..	..	..	..	..	..	1
Typhoid Fever	..	..	1	1	..	..	1	..	..	..	..	..	..	1
Paralysis, Progressive Muscular	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Intestinal Obstruction.....	..	..	1	..	..	..	..	..	..	..	1	..	..	1
Apoplexy	..	1	..	1	..	..	..	..	..	1	..	..	..	1
Totals	7	15	7	3	..	..	1	1	2	2	4	2	22	

Nativity of Deceased—United States, 18; Ireland, 2; Sweden, 1; England, 1.

Place of Burial—Wyoming, 10; Other places, 11; Cremated, 1.

REPORT OF DEATHS AND CONTAGIOUS DISEASES.—*Continued.*

MONTH OF NOVEMBER, 1901.

Number of Deaths for November, 1900, 6; for November, 1901, 18.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Heart Disease, Acute Gastritis	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1
Cardiac Disease	..	..	2	..	..	..	..	..	..	2	..	..	3	..	..	5
Appendicitis	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Peritonitis, Ex Uterine Pregnancy	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	1
Accidental Burning	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Inanition	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1
Carcinoma of Stomach	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	1
Cancer of Uterus	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Measles	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1
Chronic Bronchitis	..	..	2	..	1	..	..	1	..	..	..	..	..	..	..	2
Still Born	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Typhoid Fever	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	1
Pneumonia	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Totals	..	..	6	12	3	..	..	2	2	1	1	4	2	2	18	18

Nativity of Deceased.—United States, 13; Germany, 1; Ireland, 1;

Quebec, 1; Nova Scotia, 1; New Brunswick, 1.

Place of Burial.—Wyoming, 5; Other Places, 13.

MONTH OF DECEMBER, 1901.

Number of Deaths for December, 1900, 15; for December, 1901, 27.

Cause of Death.	White.	Colored.	Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Tuberculosis Mesenterica	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1
Old Age	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
Cancer of Stomach	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	1
Apoplexy	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1
Spina Bifida	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1
Ill Defined	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1
Bronchitis	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Still Born	..	..	3	2	5	..	..	..	..	..	..	..	..	..	..	5
Pernicious Anæmia	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1
Fatty Heart	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	1
Peritonitis, General	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	1
Cancer of gall bladder & ducts	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1
Totals	..	1	..	8	8	1	..	..	..	..	1	..	..	..	..	27

REPORT OF DEATHS AND CONTAGIOUS DISEASES.—*Continued.*MONTH OF DECEMBER, 1901.—*Continued.*

Cause of Death.	White.	Colored.	Age.													
			Male.	Female.	1 year and under.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	Over 80 years.	Totals.
Injury and Shock	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tuberculosis and Measles	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Heart Disease	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Tuberculosis Pulmonalis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Paralysis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pneumonia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Railroad Accident	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Infantile Eclampsia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Child Birth	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Totals	11	12	15	9	1	1	1	1	1	4	4	4	1	2	27	

Nativity of Deceased—United States, 21; Ireland, 2; West Indies, 1; Canada, 2; England, 1.

Place of Burial—Wyoming, 14; Other Places, 13.

Accuracy in stating the cause or causes of death is of the utmost importance for the purpose of collecting vital statistics. We cannot expect to make autopsies in all cases but it is easily observed that the higher the education and abilities of the physician the more often autopsies are performed. The board will hereafter recommend an autopsy in all cases where the cause of death is ill defined. In one case investigated by the board where it was not possible to state the cause of death an autopsy was performed and cultures taken which upon examination contained the bacillus of diphtheria. The physician had not seen the case previous to the death but the history of the case showed that she had been mildly ill. Without an autopsy it was impossible to state the cause of death.

The law requires that the undertaker should first obtain the certificate of death from the attending physician before he proceeds to arrange the body of the dead person. This

is not observed by the undertakers of this city. Hereafter the board will require strict compliance with the law.

Certificates of death will be returned for additional information which give any of the following diseases without explanation, as the sole cause of death. Abortion, Cellulitis, Child birth, Convulsion, Erysipelas, Gangrene, Gastritis, Hemorrhage, Méningitis, Metritis, Miscarriage, Peritonitis, Phlebitis, Pyaemia, Septicaemia, Tetanus.

No certificate will be accepted which gives a mere symptom as the sole cause of death such as heart failure, asphyxia, debility, dropsy, etc., unless accompanied by a satisfactory written explanation.

Disease.	Converse.	Horace Mann.	High.	Gooch.	Franklin.	Lincoln.	Livermore.	Private.	Ripley.	Sewall.	Warren.	Washington.	Winthrop.	Whittier.	Not in School.	Totals.
Diphtheria	16	1	..	2	5	..	..	..	..	2	..	1	1	24	52	
Scarlet Fever	2	..	..	4	1	1	4	1	..	..	1	1	6	12	33	
Typhoid Fever	..	1	..	..	1	..	..	..	..	..	4	..	..	11	17	
Chicken Pox	..	..	1	..	..	..	..	..	..	..	1	1	..	..	3	
Whooping Cough	..	..	..	..	1	..	..	..	..	1	..	..	..	..	2	
Measles	738	751	15	18	5	3	263	30	52	21	35	119	467	..	..	
Totals	756	952	21	26	6	7	463	33	58	24	42	166	574	..	..	

CONTAGIOUS DISEASES.

The conspicuous disease in our table of communicable diseases is measles. This spread freely through the city, partly because people believe measles to be a mild disease, free from danger. This is a great mistake and the time for thinking that all children should have measles or any other contagious disease is long since past. The same precaution should be taken in measles as in scarlet fever as it is highly contagious.

The first cases of measles originated in a poor family. These cases were mild, no physician was consulted and the

children were allowed to attend school. The close association of pupils was all that was necessary and it spread from one school to another. Had we had medical inspection of schools as suggested last year, such a large number of cases would have been averted. The board should require the same disinfection after measles as holds good in scarlet fever, but lack of money prevented us from carrying it out. The board will require moderate quarantine in cases of whooping cough and chicken pox next year and shall enforce it.

VACCINATION.

Small pox has prevailed for the past few months in Boston, and sporadic cases have occurred in nearby cities and towns. The board met Nov. 20, 1901, and voted to publish the following request.

CHAPTER 515, SECTION 3. ACTS OF 1894.

"Owing to the daily increase in the number of cases of small pox in the City of Boston, and also to isolated cases in nearby cities and towns, the board of health of the City of Melrose, respectfully requests each and every person within its limits to be successfully vaccinated during the next two weeks. In some cases it is impossible to get a successful vaccination. In all such cases at least three attempts should be made."

VACCINATION FREE.

CHAPTER 515, SECTION 4. ACTS OF 1894.

"The board of health will furnish the means of vaccination and re-vaccination free to all who apply at the office of the board of health, city hall, from 5 to 6 and from 7 to 9 p. m., every afternoon and evening during the next two weeks, or as long thereafter as may be necessary."

By order of the Board of Health,

PAUL H. PROVANDIE, M. D., Chairman.

For three weeks the office of the board of health was open from 5 to 6 and from 7 to 9 p. m., for the purpose of giving the people an opportunity to avail themselves of free vaccination. About 1200 people of all ages responded.

The method adopted by the board was to have the part of the body vaccinated carefully cleaned with soap and water, alcohol and ether, to avoid any infection. The vaccine points used were manufactured by the National Vaccine Company of Washington and Frederick Stearns of Detroit, Michigan, both standard manufacturers. The dressings used were the Bonell shield or a modification of that for those who cared to buy them, and for all others an aseptic cocoon of gauze or cotton was employed.

Those vaccinated were asked to return from time to time for an inspection. All sore and inflamed arms were dressed. Advice regarding the course, care, and results of vaccination was gratuitously given. Vaccination was repeated at least three times in those cases where at first it was impossible to obtain a positive result.

Every attempt was made by the board to treat vaccination as a surgical operation and they were rewarded by excellent results. A very few were unsuccessfully vaccinated or revaccinated. Less inflammation occurred in cases where the virus obtained from Frederick Stearns was used, and the proportion of "takes" as compared with the National Vaccine was about the same.

During the vaccination period shields were popular and were used by this board. The amount charged for shields fluctuated, due to the large demand for them at that time. They were advantageous since they facilitated the work and could be applied at once without waiting for the lymph to dry, enabling people to pass out promptly and therefore avoiding congestion.

Shields were an irritant however, inasmuch as they created a vacuum, cupped the flesh, the caps filled with the material oozing from the sore, and excoriated the surrounding skin. People often left them in place too long. The perforations filled with lint from the underwear, excluding the air and thus causing a vacuum. The plaster which held them irritated

the surrounding skin, causing intense itching in some cases. Shields should not be used longer than two days, when a soft sterile dressing should be substituted.

All factories, corporations and others employing a large number of people were requested to vaccinate their employees. This was willingly done by them under the supervision of the chairman of the board of health. The same method was followed as was used at the city hall with equally good results. Fourteen hundred would cover the number of employees vaccinated.

All lodgers at the city hall were required to be vaccinated before they could remain over night. In only one case was there objection.

The health committee considered the nurses' bills exorbitant and thought that nurses from the hospital might have been obtained free of charge. The board did not question the ability of pupil nurses to do the work, but as a protection to ourselves thought that only graduates should be chosen. Let us suppose that a septic arm or leg followed vaccination as it did in other cities, and a suit for damages was entered against the city of Melrose, as has happened in Boston, the claimant would have a just reason for his complaint had we procured not so well experienced nurses for the work. The board fortified itself as well as the city by procuring the best available talent.

So long as no complaints were entered for poor results following vaccination, the honorable health committee might consider the matter of employing pupil nurses, but had we employed pupil nurses and any bad results followed, then the health committee would have been the first to inquire why we did not procure graduates. The nurses obtained their experience in vaccinating in physicians' offices as well as at the factories, and were as competent to perform the work as any graduate physician, and were more careful about the operation and its necessary cleanliness than most physicians.

Regarding the exorbitancy of the nurses' bills, the majority of the board does not think they were exorbitant. Careful people who do work of this kind should receive a proper

recompense for the honesty and conscientiousness with which they pursue it.

The expense of doing the work was less per capita than that of any board of health of whom this board has obtained the figures.

MALARIA.

Since it has been proved that the mosquito is the means of conveying this disease, that its habitat is the swamps, and that the larvae are developed in water, the board of health should be provided with a sum of money which could enable them to co-operate with other cities and towns in trying to exterminate this organism. The things to be done are three-fold and they have been accepted by sanitarians and students of the disease, malaria.

First, we must rid the neighborhood of mosquitoes.* Second, protect persons from bites of mosquitoes as far as possible. Third, protect persons ill with malaria from bites of mosquitoes to prevent the dissemination of infected mosquitoes. Also urge thorough treatment of all cases of malaria.

The destruction of mosquitoes requires the draining of the soil as the only means by which they can finally be removed. Cultivation and tillage of the soil will tend to the removal of puddles. Pouring kerosene upon the puddles is a very good remedy but it is only palliative. We should get rid of the puddles because the kerosene will sooner or later disappear and the pool would give rise to a new crop of mosquitoes. Until some better method of destroying the breeding ground of mosquitoes is discovered the board should cover stagnant places with kerosene or add lime to the water to cause its alkalinity.

People should properly screen their houses and all persons suffering with malaria should not stop treatment until every vestige of the malarial organism disappears from the blood as shown by microscopical examination.

BROWN-TAIL MOTH.

Last year physicians reported a large number of cases of a distressing skin disease due to the irritation produced by this moth. Many of these cases resisted all treatment and persisted for some time. The subjective sensations induced by these lesions are distressing in varying degree according to the susceptibility of the individual. A petition was received by the board signed by physicians and laymen requesting us to take some action. Since the board had no money with which to undertake the necessary work, we referred it to His Honor the Mayor. The board is of the opinion that the amount appropriated by the board of aldermen to destroy this pest is far too small. A larger sum should be available and the city should be more active in destroying what the board believes is a menace to the public health and safety.

POISON IVY.

This poisonous plant is responsible for a very painful and extensive inflammation of the skin, although at times it may be localized and give little trouble. Many people are unfamiliar with the appearance of this and other poisonous plants, therefore they should be protected by the following regulation of the board.

"An owner or occupant of any land upon which there is any poison ivy or any poisonous weed within fifty feet of any highway or street shall cause such ivy or weed to be removed within five days after receiving notice so to do by the board of health."

CONTAGIOUS HOSPITAL.

During the past few years the city has expended a large sum for the care of persons suffering from contagious diseases. It is difficult to secure a house for a temporary hospital for these diseases as many fear that it will interfere with its rental. It is also expensive to equip and maintain such a temporary hospital and as only competent nurses are entrusted by the board with these cases the amount expended

for this item alone is large. This could be obviated if the city would provide a hospital as the law requires. Chapter 171, Section 1, of the Acts of 1901. "Every city in the Commonwealth shall establish within its limits and keep itself constantly provided with one or more isolation hospitals for the reception of persons having small pox or any other disease dangerous to the public health. Such hospitals shall be subject to the orders and regulations of the boards of health of the cities in which they are respectively located.

Section 2. Whenever a city shall refuse or neglect to carry into effect the provisions of Section 1, of this act after having been requested so to do by the State Board of Health it shall be liable to forfeit a sum not exceeding \$500 for each refusal or neglect."

Not only is a hospital necessary for the poor of the city but it is essential for efficient quarantine.

Hospitals for the care of communicable diseases are essential for their control. It is well nigh useless to attempt to enforce isolation unless means are provided in hospitals for the proper isolation of the many cases which are sure to develop under conditions where their isolation is impossible. It is not only for the welfare of the community but also for the welfare of the patient that such hospital accommodations should be provided. Many cases of communicable diseases cannot receive in their homes the care that they require, and oftentimes travellers, tramps and inmates of general hospitals are attacked with communicable diseases, and most of such cases should be for their own good, at once removed to a suitable isolation ward. The board recommends that the sum of \$3,500 be appropriated to build a hospital for communicable diseases according to the plan now in possession of this department.

BACTERIOLOGICAL LABORATORY.

The importance of a laboratory equipped with the necessary apparatus for the examination of suspected specimens of diphtheria or tubercle bacilli or to ascertain the presence or absence of the Widal test for typhoid as well as the ex-

amination of blood for malarial organisms is imperative. At the present time this work is done by the State Board of Health and the amount of time consumed in transportation of suspected material to the state house causes too great delay in the analysis of specimens, and their report, particularly in the case of diphtheria which is of vital importance in determining the use of anti-toxine, the specific of that disease. Delay is so serious that valuable time is often lost when the patient might be well under the influence of the serum. The board of health should have a laboratory from which we could send an early report to the anxious physician. With such a laboratory a report could be obtained within an hour after the specimen had been received. The board hopes that \$300 will be available within a short time to equip and maintain a bacteriological laboratory.

MEDICAL INSPECTION OF PUBLIC SCHOOLS.

The principal aim in recommending medical inspection to the honorable school committee is to bring to light unrecognized communicable diseases. During the past year the physician of the board by request of the superintendent of schools has examined several children of the different schools and many children have been referred to him for vaccination as well as for certification of successful vaccination. Of those who were inspected, several had pediculosis and were advised as to treatment. Others had different skin diseases and all were excluded from school until recovery. There have been from time to time mild cases of measles and diphtheria in pupils attending schools. The plan proposed is to assign doctors who have already volunteered their services to different schools, who will visit their respective schools sometime during the forenoon.

Each teacher reports any pupil under her charge who appears ill and the opinion of the physician who inspects such school is given and if necessary the child is sent home with a note to the parents advising them to consult their family physician. Not only is the board of health able to detect early, contagious diseases in this way but the inspectors would give advice to teachers and pupils regarding sanitation and other hygienic problems.

CLASSIFICATION OF NUSANCES EXAMINED BY THE INSPECTORS
AND BOARD DURING THE YEAR.

Ashes complaints,	146
Children investigated with parasitic diseases,	18
" " " scabies,	4
" " " pustular affections,	4
" " " ivy poisoning,	4
Contaminated brooks,	4
Dirty yards,	7
Dirty cellars,	3
Dirty children,	4
Dirty sheds,	2
Dead animals near pond	2
Deaths investigated,	2
Dead animals removed,	68
Disobeying quarantine,	3
Emptying cesspool without license,	1
Escaping gas,	3
Emptying cesspools on land,	9
Foul closets,	4
Foul henneries,	2
Foul cesspools,	3
Foul privies,	4
Foul urinals,	1
Filthy stables,	2
Filthy dump,	6
Filthy tenements,	4
Obstructed brooks,	2
Obstructed drains,	1
Filthy bakeries,	1
Glanders reported,	2
Garbage complaints,	44
Horses ordered killed,	2
Hens in cellars,	3
Horse in cellar,	1
House drainage flowing into cellar,	8
Insufficient closet accommodations,	1
Killing horses without license,	1
No water supply to closet,	2

Overflowing cesspools,	36
Offensive odors,	4
Pigs without license,	12
Plumbing examined at owners or occupants request,	8
Suspicious contagious diseases investigated,	12
Should enter sewer,	59
Stagnant water on lots,	4
Streams polluted,	4
Swine nuisance,	1
Wet cellars,	2
Using catch basin as sewer,	2
Crowing roosters,	4
Cesspools cleaned,	4
Manure exposed,	4

SANITARY INSPECTOR.

The number of nuisances investigated by the board did not include all that were reported, only the written complaints were attended to and some of these were not followed as well as they should have been. This branch of the work cannot be properly done unless one member of the board gives his entire time. The board has recommended the appointment of a sanitary inspector. It is not proper for the members of the board to investigate only the more important nuisances, those for instance that require a hearing. Until a sanitary inspector is provided, sanitary laws cannot be rigidly enforced.

ASHES.

His Honor the Mayor referred in his inaugural to the collection of ashes as an "unqualified success." This criticism was rather premature. This is the first time in the history of Melrose that this work has been done and one could hardly expect it to run smoothly at first. The board has had many complaints to deal with. In a large number the householders were at fault. Many citizens did not know in which ward they lived or did not comply with the instructions on our printed circulars.

It was difficult to formulate a plan whereby a large area

could be covered quickly and efficiently. At present the board has few complaints and the contractor is doing the work satisfactorily. This work cannot be done properly after the contract expires unless the city appropriates at least \$1,650 or the city horses and carts are used for the collection and disposal of the ashes.

DUMPS.

The locations of the public dumps with the exception of one are satisfactory. They are easily accessible and a large quantity of ashes has been desposited upon all. All ashes, whether removed by the contractor or by private individuals should be deposited upon one of the five dumps. This would do away with the nuisances caused by throwing ashes on vacant lots. A man should be provided whose duty would be to keep the dumps in order. This would necessitate the burning of all uncovered paper and the spreading evenly all ashes dumped by the contractor. If the dumps were evenly spread it would be possible to sprinkle the ashes and do away with dust. The board will require all carts used for collecting ashes to be covered by canvas on their way to the dumps.

NIGHT SOIL.

One scavenger has been licensed to do this work and new regulations have been adopted to control it. The additional attention given by the board to the care of night-soil has to a certain extent disposed of many complaints which were constantly being reported. The disposal of this material is not yet satisfactory as a part of our method has been prevented.

The board was permitted to deposit night soil on the city farm according to their regulations. The board, however, has been deprived of this privilege because of a complaint which upon investigation proved unjustified. It should be deposited on the city farm according to the original plan, or the city should provide a tank in some remote place. The tank for the reception of night soil could be connected with the public sewer and with the proper

screens the danger of obstructing the sewer would be obviated. Obstruction of the sewer was one of the reasons set forth to prevent the scavenger from emptying this material into a man-hole on some sewered street away from the centre of the city when such a request was made by this department. A tank could be built for \$400. This is the only proper way to dispose of night soil.

GARBAGE.

Refuse is collected by Thomas R. Higgins. Although the board often has complaints to investigate the contractor has done his work satisfactorily. The amount appropriated for this work is insufficient and owing to the additional amount of work done by the contractor it will be necessary to ask for a larger appropriation. Better wagons should be provided preferably metallic ones as these are easily cleaned daily and are not as offensive. Wooden wagons cannot be thoroughly and satisfactorily cleaned. The board recommends that the city provide the proper wagons for conveying garbage through the streets.

Householders are not careful enough about the way offal is kept. The receptacles should always be covered and placed in protected places away from animals. They should as far as possible prevent freezing of the offal as well as allowing rain-water to fill their receptacles.

WET LAND.

Three petitions were received from persons injuriously affected by wet land. Hearings were given as the law directs. In all cases the land was prejudicial to the public health. The board suggested remedies for these people. No action has been taken by the city. Conspicuous among these is Dix pond which is now used as a public dump, but not successfully, as the outflow of water is prevented by the obstructed drain under Main street. The board asked for the removal of this obstruction. Here again no action was taken. The board will consider this wet land again next

year and will with the assistance of the State Board of Health try to accomplish the abatement of all nuisances described in the three petitions.

SURFACE DRAINAGE.

Although the time has not come when Melrose can afford to execute the plans of the excellent system of drainage described by W. D. Hunter, the city should provide temporary remedies for the people affected by faulty surface drainage.

SCHOOL HOUSES.

There is still one school house in which the plumbing is not connected with the public sewer. At the suggestion of the chairman of the honorable school committee the board of health has asked the state board of health for advice regarding the efficiency of the system used in this building for disposal of sewage.

BAKERIES.

The following bakers do business in Melrose: Jesse A. Dill & Co., Friend Bros., John Meister, Winsby, Burkett & Hensby. Their establishments have been inspected. Generally speaking, they are clean, neat and wholesome. A few alterations were necessary in some and when the owners of the bakeries were informed of necessary changes they promptly attended to the requirements.

BOARDING HOUSES FOR INFANTS.

The following applications to maintain boarding houses for infants have been received by the board of health and approved.

Mrs. Emma R. Hitchins, No. 6 Waitt street, Mrs. Dora F. Whittredge, No. 317 East Foster street, Mrs. Anna M. Pratt, off Swains Pond avenue.

DRINKING FOUNTAINS FOR HORSES.

These should be cleaned once a week and sterilized by using gasoline lamps as fountains are the sources of conveying glanders.

STERILIZER.

The board should be provided with a sterilizer into which infected articles including books taken from homes in which there have been communicable diseases, could be properly disinfected before returned either to the owner, the public library or the school room.

ORDINANCES.

Ordinances should be made and enforced controlling the production, sale, distribution and delivery of milk. Chapter II of our rules and regulations, with additions, should be made an ordinance. The harvesting, selling and delivering of ice should be regulated by an ordinance. Chapter 12 of our rules should form the substance of an ordinance.

Gas-fitting should have more attention to prevent leaky fixtures. Escaping gas is responsible for illness and many buildings in Melrose have leaky fixtures. A carefully regulated ordinance should control gas-fitting.

CITY HALL.

The board wishes to call attention to the filthy condition of the basement, the improper ventilation of the tramp room and inadequateness of this place as a lodging for tramps, that the city is at fault in not providing water-closets for the women who are employed by the different departments, and we respectfully call your attention to the law regarding sanitary provisions for public buildings, Acts of 1894, Chapter 508, Section 40. Unless the city improve the condition of the basement and provide the required water-closets within a reasonable time the board feels that it is their duty to see that said laws are enforced.

PAUL H. PROVANDIE,
JOSEPH H. ROBINSON,
JOHN T. TIMLIN,

Board of Health.

Report of the Inspector of Plumbing.

To the Honorable Board of Health, Melrose, Mass.:

GENTLEMEN:—I hereby submit my fourth annual report.

No. of applications received,	233
“ “ permits granted,	233
“ “ sewer connections,	124
“ “ cesspool “	12
“ “ new houses,	29
“ “ additions or repairs,	33
“ “ applications unfinished,	35
Total number of new fixtures installed,	528
No. of water-closets,	146
“ “ sinks,	131
“ “ wash-trays,	72
“ “ bath-tubs,	79
“ “ wash bowls,	93
“ “ urinals,	2
“ “ ice chests,	4
“ “ Sitz bath,	1
“ “ new traps on repair work,	26

Respectfully submitted,

JOHN T. BARKER,

Jan. 1, 1902.

Inspector of Plumbing.

Report of the Board of Examiners of Plumbers.

To the Honorable Board of Health, Melrose, Mass.:

GENTLEMEN.—There were two meetings of this board during the past year, and two applicants were examined, one for a master plumber and one for a journeyman.

Both passed a very creditable examination and were granted licenses.

Respectfully submitted,

PAUL H. PROVANDIE.

Report of Inspector of Cattle and Provisions.

MELROSE, January 1902.

To the Honorable Board of Health, Melrose, Mass.:

GENTLEMEN:—I have to report whole number of swine inspected and branded, one thousand two hundred and seventy-nine. Two horses with glanders have been condemned and killed.

WM. H. DOLE, Inspector.

Report of the Inspector of Milk.

To the Honorable Board of Health, Melrose, Mass.:

GENTLEMEN:—

Licensed grocery stores and bakeries,	44
Licensed milk dealers,	78
Total,	122

Samples to the number of 50 were analyzed and of these a few were found to be slightly under the percentage required but were not low enough to prosecute. The milk from the dairies about this part of the state stands well on examination.

The milk from the contractors usually is just at the percentage the law calls for and sometimes slightly under. It is none too good. Only two complaints were made the past year and these were found not to be the fault of the milkman. The most trouble with poor milk is caused at the stores, the clerks using from the top of the can; those getting the last of the milk getting poor milk.

Most of the dealers when trying new dairies have them examined first by the inspector. The state inspectors have been in Melrose once with the local inspector and taken samples.

The samples of vinegar have stood the tests made and were of good strength.

The best sample of milk was from one of our Melrose dairies which measured $14\frac{1}{2}$ per cent., $1\frac{1}{2}$ more than required. Three samples taken 14 , $14\frac{1}{2}$, and $13\frac{3}{4}$.

Yours, WILLIAM S. BRIRY,

Inspector of Milk.

Report of Engineers of the Fire Department.

To His Honor the Mayor, and the Board of Aldermen:

GENTLEMEN:—The chief engineer herewith submits the second annual report of the fire department of the city of Melrose.

It will contain a roll of the several companies and an inventory of all apparatus owned by the city and under the supervision of this department; a record of all fires and alarms which have occurred the past year and causes with names of owners and occupants, the loss and insurance as nearly as could be ascertained and some recommendations for the ensuing year.

ORGANIZATION.

The department consists of sixty-three men divided as follows: Chief; two assistants, one engine company, fifteen men; three hose companies, ten men each; one ladder company, fifteen men.

I would advise the gradual increase of permanent men year by year until the whole force is placed on a permanent basis.

APPARATUS.

The apparatus is kept in the best possible condition and at present consists of the following: one steam fire engine, four hose wagons, one ladder truck, one coal wagon and ten hand extinguishers.

HORSES.

There are eight horses in service, several of which are getting old and otherwise unfit for fire duty.

HOSE.

This important branch receives constant care and attention. The past year there has been purchased 800 feet of rubber lined cotton hose.

There is on hand 4800 feet of good hose, 1500 feet of fair and 400 feet of poor hose.

I would recommend the purchase of 800 feet of new hose the coming year as the old hose is liable to give out at any time.

FIRE ALARM.

This branch of the service has been maintained in good condition under the care of Supt. Whidden.

With the exception of unavoidable accidents it has worked to perfection.

The general promptness in giving alarms has aided much in keeping the loss of property at the present low figure.

During the year there has been fifty-four alarms as follows:

Bell alarms,	.	.	.	.	.	.	.	.	.	36
Still alarms,	.	.	.	.	.	.	.	.	.	18
Total,	.	.	.	.	.	.	.	.	.	54
Value of property exposed to fire,	.	.	.	.	.	.	.	.	.	\$127,339 00
Damage to " " " "	.	.	.	.	.	.	.	.	.	31,111 00
Insurance on " " " "	.	.	.	.	.	.	.	.	.	86,130 00
" paid on property exposed to fire,	.	.	.	.	.	.	.	.	.	23,598 00
Total loss " " " " "	.	.	.	.	.	.	.	.	.	7,513 00
Total appropriation,	.	.	.	.	.	.	.	.	.	10,762 20
" expenditure,	.	.	.	.	.	.	.	.	.	10,243 65
Balance unexpended,	.	.	.	.	.	.	.	.	.	518 55

For itemized report of expenditures, see auditor's report.

March 5, old hose,	.	.	.	.	.	.	.	.	.	\$20 00
July 10, old hose,	.	.	.	.	.	.	.	.	.	27 50
Dec. 17, old stove,	.	.	.	.	.	.	.	.	.	5 00

For which hold treasurer's receipts.

RECOMMENDATIONS.

I would recommend the appropriation of \$11,906.00 for the ensuing year.

There should be a permanent man and horse for Hose 4, on the East Side, and also for Hose 2.

I would recommend a storage battery instead of the gravity battery for the fire alarm, as after it is in it will be a great saving in supplies; also the purchase of a chemical engine by the aid of which many fires could be extinguished without the use of much water and thus save much damage to property.

A permanent engine man is much needed and I would recommend one be appointed in accordance with the city charter.

There should be a change in several of the horses as they are getting old and unfit for service. It is for the best interests of the department and city that this should be done.

CONCLUSION.

My acknowledgements are tendered the mayor, the heads of the several departments, and the members of the police force for their hearty support.

To the officers and members of the several companies and the permanent men, I wish to express my appreciation for their promptness in responding to all calls for duty, the support and good will extended me on all occasions and for their effort to sustain the reputation of the department.

Respectfully submitted,

A. WILBUR LYNDE.

Chief Engineer.

ROLL OF FIRE COMPANIES.

STEAMER AND HOSE COMPANY NO. 1, Central Station.

Name.	Occupation.	Age.	Residence.	Admitted.
Capt. Thomas J. Hawkes...	Barber	45	25 Russell	July 1, 1881
Lieut. Chas. F. Woodward...	Surveyor	32	39 Upham	Sept. 2, 1890
J. Waldo Emerson	Perman't man	57	51 Dell av.....	April 2, 1872
Thomas B. Stantial	Carpenter	66	15 Winthrop...	Dec. 7, 1875
Arthur L. Upham.....	Carpenter	47	253 First	Aug. 1, 1883
Dean T. Stockwell	Perman't man	40	11 Upham	Nov. 3, 1891
John H. Edwards.....	Engine man	55	31 Waverly pl..	April 1, 1892
Chas. W. Edwards	Perman't man	31	612 Main	April 1, 1892
David R. Woodward	Carpenter	34	39 Upham	April 2, 1893
Walter M. Barrett.....	Painter.....	26	290 W. Emerson	April 6, 1897
Frank A. Howe	Laundry	44	13 Lynde ...	Feb. 1, 1899
Geo. A. Dean	Expressman	26	73 Essex	Dec. 5, 1899
William J. McCoubry	Blacksmith.....	35	53 Upham	Feb. 1, 1899

HOSE COMPANY NO. 2, Central Station.

Name.	Occupation.	Age.	Residence.	Admitted.
Capt. J. M. Hamlin	Produce.....	33	269 Main	July 11, 1893
Lieut. R. Gibbons.....	Carpenter	44	121 Trenton	Mar. 3, 1874
J. R. Gibbons.....	B'l'd'g mover...	38	124 Trenton	May 2, 1882
H. W. Simpson	Boot maker.....	33	Hose No. 2.	July 3, 1899
W. H. Riley, Jr.....	Clerk	28	24 Lynde	Feb. 2, 1897
C. F. Doherty.....	Barber	34	22 Lynde ...	Aug. 7, 1894
F. E. Newell.....	Coal and wood...	41	35 Hurd	Dec. 5, 1899
P. Hamlin.....	Produce.....	30	58 Pleasant ...	April 1, 1900
M. L. Pullen ..	Drug clerk	29	66 Summer	April 1, 1900

HOSE COMPANY NO. 3, Franklin Street, Melrose Highlands.

Name.	Occupation.	Age.	Residence.	Admitted.
Capt. Frank H. Cheever....	Clerk	28	894 Main	Feb. 5, 1895
Lieut. Herbert E. Singer....	Clerk	29	147 Franklin...	June 2, 1896
George E. Burnham.....	Carpenter	36	1 Orient pk...	July 5, 1899
Leverett D. Newhall	Perman't man	46	23 Ellsworth av	Jan. 9, 1885
William R. Holly.....	Carpenter	34	24 Sargent.....	Jan. 3, 1899
Edgar W. Mansfield.....	Painter.....	23	92 Ashland	April 3, 1900
William F. Simpson.....	Grocer	29	Renwick rd.	April 3, 1900
Oscar F. Low.....	Lather	24	112 Ashland ...	Aug. 1, 1899

HOSE COMPANY NO. 4, East Foster Street.

Name.	Occupation.	Age.	Residence.	Admitted.
Capt. Chas. E. McKinnon...	Clerk	37	159 Laurel.....	May 1, 1890
Lieut. Edward W. Russell..	Engineer	29	4 Perham ct..	April 1, 1894
Charles Critchett	Railroad	38	Whitman ave	May 1, 1892
George D. Russell.....	Clerk	27	142 Laurel	April 1, 1894
George M. Bayne	Clerk	25	26 Oakland ...	May 1, 1898
Frank C. Newman.....	Decorator	35	293 Grove	May 1, 1898
Edgar J. Smith	Carpenter	22	151 Laurel	July 1, 1900
Vernon V. Vaughn	Carpenter	25	Argyle	July 1, 1900
Fred S. Boardman.....	Baker	25	346 E. Foster...	July 1, 1900
Frank W. Johnson.....	Plumber	27	23 Sewall	Jan. 1, 1900

HOOK AND LADDER COMPANY NO. 1, Central Station.

Name.	Occupation.	Age.	Residence.	Admitted.
Capt. Joseph Edwards.....	Wheelwright ..	48	612 Main	May 4, 1877
Lieut. Harry R. Norton	Grocer	42	27 E. Emerson.	Mar. 1, 1895
Daniel E. Gibson.....	Clerk	38	13 Florence....	Aug. 1, 1900
Robert H. Whidden.....	Perman't man	34	26 Winthrop...	Sept. 5, 1890
Curtis S. Gordon.....	.....	63	21 Winthrop...	May 2, 1890
William H. Stewart.....	Carpenter	51	36 Albion	June 6, 1873
Josiah Tyzzer.....	Blacksmith....	65	5 Central ter..	Aug. 6, 1880
William A. Lynde.....	Farmer.....	44	529 Lebanon...	Mar. 7, 1876
Frank H. Tyzzer.....	Painter	37	5 Central ter..	Oct. 7, 1887
Edward H. Carley	Carpenter	27	147 Myrtle.....	Jan. 6, 1899
William J. Warren.....	Painter	35	187 Grove	July 1, 1900
Henry S. Robertsor.....	Painter.....	34	102 Grove	Oct. 7, 1887
Frank I. Storey	Painter.....	36	40 Linwood av.	Jan. 1, 1900

STATEMENT OF FIRES AND ALARMS FOR THE YEAR ENDING
JANUARY 31, 1901.

February 1; box 42; building Third street; owned by Henry Osborne; occupied by J. Canney; value of building and contents, \$800; insurance, \$500.

February 8; box 54; building Brunswick park; owned and occupied by George A. Mitchell; value of building and contents, \$3,500; damage, \$985; insurance, \$2,800; insurance paid, \$985.

February 14; still alarm; building Emerson street; owned by Webster; occupied by Dr. Holden; value of building and contents, \$4,000; insurance, \$3,500.

February 16; box 56; building Ferdinand street; owned and occupied by H. J. Tuttle; value of building and contents, \$7,500; damage, \$2,200; insurance, \$5,500; insurance paid, \$2,200.

February 22; box 45; building Emerson street; false.

February 23; box 47; building First street; owned and occupied by Sterling Jones; value of buildings and contents \$5000; damage, \$75; insurance, \$4000; insurance paid, \$60.

April 13; box 54; building Melrose street; owned and occupied by W. S. Mitchell; value of buildings and contents, \$3000; damage, \$1080; insurance, \$1500; insurance paid, \$1080.

April 13; still alarm; Washington street; woods and grass.

April 13; box 27; Whitman avenue; woods.

April 13; box 43; building Myrtle street; owned by Dr. J. S. Clark; occupied by Mrs. McConnell; value of building and contents, \$4000; damage, \$13; insurance, \$3000; insurance paid, \$10.

April 21; still alarm; building Myrtle street; owned by Dr. J. S. Clark; occupied by Mrs. McConnell; value of building and contents, \$4000; damage, \$10; insurance, \$4000; insurance paid, \$10.

April 24; box 41; building Malvern street; owned and occupied by Harry Pratt; value of building and contents, \$5000; damage, \$10; insurance, \$2000; insurance paid, \$10.

April 29; still alarm; Melrose street; grass.

May 4; still alarm; Reading Hill avenue; grass.

May 4; box 51; Hesseltine avenue; woods.

May 6; box 51; Green street; woods.

May 9; box 49; building Poplar street; owned by Mrs. C. B. Baldwin; value of building and contents, \$4,000; insurance, \$2,500.

June 6; still alarm; building Main street; owned and occupied by William J. McCoubry.

June 17; box 38 and still alarm; building Maple street; owner Mrs. D. Finnigan; of no value.

July 16; box 54; owner Mrs. L. Mitchell; occupied by John Duff; value of building and contents, \$6500; damage, \$1900; insurance, \$5600; insurance paid, \$1080.

July 21; box 41; building Lebanon street; owned and

occupied by E. McCarthy; value of building and contents, \$1300; damage, \$850; insurance, \$850; insurance paid, \$850.

July 27; box 43; building Upham street; owned by Ramsey; occupied by Mitchell; value of building and contents, \$2000; damage, \$800; insurance, \$1500; insurance paid, \$500.

August 25; box 32; building Main street; owned by Sircom Bros.; damage, 10 casks lime.

August 29; still alarm; building Ellsworth avenue; owned by W. D. Evering; occupied by L. D. Newhall; value of building and contents, \$2,300; insurance, \$2,000.

September 10; box 49; building Pine street; owned by O. F. Timlin; occupied by L. A. Timlin; value of building and contents, \$2,300; insurance, \$2,000.

September 15; still alarm; building Grove street; owned by S. A. Lewis; occupied by George Russell; value of building and contents, \$2,000; insurance, \$1,800.

September 19; still alarm; building Rowe street; owned by F. Lancier; occupied by Mary A. Gott; value of building and contents, \$3,300; damage, \$10; insurance, \$2,500.

September 19; box 27; building Gooch street; owned and occupied by J. A. Fish; value of building and contents, \$5,700; damage, \$205; insurance, \$5,700; insurance paid, \$205.

September 27; box 32; building Main street; owned by Mrs. F. Massey; occupied by W. B. Webster; value of building and contents, \$3,500; damage, \$56; insurance, \$3,500; insurance paid, \$56.

October 3; box 32; building Chestnut street; owned and occupied by Mrs. W. D. Fiske; value of building and contents, \$8000; damage, \$5000; insurance, \$5000; insurance paid, \$5000.

October 4; box 35; building Vinton street; owned by S. F. Barrett estate; value of building and contents, \$1200; no loss.

October 17; box 26; building Fairmount street; owned and occupied by F. H. Smith; value of building and contents, \$2000; insurance, \$2000.

October 21; box 35; building Florence street; owned by R. Gibbons estate; occupied by T. J. Gunning; value of

building and contents, \$2640; damage, \$177.50; insurance, \$2133; insurance paid, \$177.50.

October 26; still alarm; Meridian street; grass.

October 27; box 46; building Main street; owned by S. E. Benson; occupied by Fells Ice Co.; value of building and contents, \$3000; insurance, \$2500.

October 29; still alarm; Porter street; woods.

October 30; still alarm; Porter street; woods.

October 31; still alarm; building corner Winthrop and Myrtle streets; owned by Miss R. Howe; occupied by John Holden; value of building and contents, \$3,200; damage, \$25; insurance, \$2,000.

November 2; still alarm No. 1; Winthrop place; woods.

November 2; still alarm No. 2; Winthrop place; woods.

November 3; box 26; Appleton street; woods.

November 4; box 55; Ashland street; false.

November 10; still alarm; Porter street; grass.

November 11; box 61; building School street; owned by Charles Sawyer; occupied by James Fahey; value of building and contents, \$2800; insurance, \$2600.

November 11; box 43; building Myrtle street; owned by Miss R. Howe; occupied by John Holden; value of building and contents, \$3200; damage, \$25; insurance, \$2000.

November 20; box 51; building Main street; owned by G. W. Chipman estate; value of building and contents, \$3000; insurance, \$2700.

November 22; box 49; building Emerson street; owned by A. H. Sturges; value of building and contents, \$3000; insurance, \$2500.

December 12; box 51; building Franklin street; owned and occupied by Chester B. Shepard; value of buildings and contents, \$12,000; damage, \$5,900; insurance, \$8,000; insurance paid, \$5,300.

Total value of buildings and contents, \$100,240; total damage, \$19,548.50; total insurance, \$87,183; total insurance paid, \$17,763.50; total loss, \$1,785.

Report of the Sealer of Weights and Measures.

To His Honor the Mayor and Board of Aldermen of the City of Melrose:

GENTLEMEN: I herewith respectfully submit the annual report of the sealer of weights and measures department for the year ending January 31, 1902.

EXPENSES.

Salary from February 1, 1901, to February 1, 1902,	\$200 00
1 Branding iron,	1 50
2 Stencils,	50
1 Set of seals,	2 40
Printing,	3 50

Total expenses from February 1, 1901, to February 1, 1902,	\$207 90
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EARNINGS OF DEPARTMENT.

Total amount of earnings from February 1, 1901, to February 1, 1902,	\$47 44
The amount uncollected due department,	2 44

Balance paid to city treasurer,	\$45 00
Unpaid bills of previous financial year paid to treasurer,	3 20

Total amount collected which has been paid to the city treasurer to be credited to the department of weights and measures, from February 1, 1901, to February 1, 1902, \$48 20

OPERATIONS OF THE DEPARTMENT FROM
FEB. 1, 1901, TO FEB. 1, 1902.

Number of scales 5000 lbs. to 10 tons capacity tested	3
" " portable platforms tested,	27
" " counter " "	3
" " spring balances tested,	47
" " trip scales tested,	7
" " counter balances tested,	65
Total number of scales tested,	152
Number of scales tested and found correct . . .	143
" " " " " adjusted before sealing,	7
" " " that were condemned,	2
Total number of scales tested,	152
Number of weights tested and found correct, . .	452
" " " " " " light and ad- justed,	60
Number of weights tested and found heavy and ad- justed,	5
Total number of weights tested,	517
Number of dry measures tested and found correct,	135
" " " " " " condemned, . .	2
Total number of dry measures tested,	137
Number of wet measures, including glass milk jars and cans tested and found correct,	3,122
Number of wet measures, including glass jars, tested and condemned,	86
Total number of wet measures tested,	3,208

THE AMOUNT OF WORK DONE IN THE OFFICE FROM
FEBRUARY 1, 1901, to FEBRUARY 1, 1902.

Scales of all descriptions tested,	23
Weights tested,	78
Dry measures tested,	45
Wet measures, including milk cans tested,	3,010
Yardsticks,	12

Total pieces tested in the office, 3,168

Yours respectfully,

WILLIAM L. PIERCE,

Sealer of Weights and Measures.

Melrose, February 17, 1902.

Report of the Overseers of the Poor.

To His Honor the Mayor, and the Board of Aldermen, City of Melrose:

GENTLEMEN:—The overseers of the poor respectfully submit the following report for the year ending Jan. 31, 1902.

There have been aided by the charity department during the year, 323 persons, 283 receiving partial support and 40 full support. Of those receiving partial support there were 45 families consisting of 113 adults and 170 children. Of the fully supported 20 were insane, 19 sane, and one feeble minded. They were supported at the following places: 20 in insane hospitals, one at Baldwinsville hospital for children, 2 at the House of the Angel Guardian, 13 at the Pratt farm and 4 in private families.

We are pleased to note that while the number of persons aided is in excess of last year, the expense has not increased in proportion. We have the same problem to solve every year with reference to how best we can relieve the poor and distressed at the least expense. The Pratt farm still acts as a deterrent to many who would apply for aid but who

would necessarily be sent to the farm on account of their inability to work, and no immediate possibility of their becoming self-supporting.

The principal reasons for granting aid to the many that we do is owing to the fact that in most of the families are young children. It has been the rule and practice of the board not to send families or those with young children to the Pratt farm as we deem it for the best interests of the child and of the city that it should be given an opportunity to become self-supporting.

If measures were taken in this city as in larger cities, and families were broken up, children sent to the state for adoption in families in the country, and the fathers and mothers sent to the farm, we should reduce our expenses very much, but it does not seem wise as yet for the department to enforce a rule which carries with it a seeming severity and inhumanity.

All cases that have been aided during the past year have been investigated and the conditions of the home and the character of the parents have been considered, and advice given as to the best method that the applicants might use in their endeavors to become self-supporting. We are pleased to note that employment has been provided for many of our citizens during the year which has kept them from applying to this board for relief.

PRATT FARM.

The work of this department has been carried on under the management of Mrs. Christie L. Chandler as matron, whose labors have been untiring in behalf of the poor people that have come under her charge and her service has been entirely satisfactory to the board.

There have been a number of improvements made in the farm but at a very little expense. We recommend the lighting of the buildings by electricity as a safeguard from fire, thus keeping the inmates from the use of lamps. The laundry work also should be removed from the kitchen and placed in a room by itself.

The health of the inmates has been good during the year.

We have met with two serious problems in the management of the Pratt farm during the year which deserve perhaps more than passing notice. Certain persons objecting to the department's improving land belonging to the farm and raising fodder for the keeping of cows, and selling milk therefrom, petitioned the mayor to request the department to stop the selling of milk. The opinion of the city solicitor was requested, which we herewith enclose.

Hon. John Larrabee, Mayor, Melrose, Mass.

DEAR SIR: In response to your communications of February 27 and April 1, 1901, relative to protest of certain milk dealers against the city selling milk produced on the town farm, I have to say as follows:

The law gives the overseers of the poor authority to carry on the farm for the best interest of the city, taking into consideration the number of inmates, whether male or female, their condition of health, ability to work, and kinds of work that each is able to do. Taking the facts as stated in this case, it seems to me that the overseers of the poor are well within the law and nothing which has been called to my attention has been done by them which to my mind in any degree exceeds their authority or oversteps the bounds of reasonable and prudent administration of the powers conferred upon them to manage the work house or poor farm. The keeping of cows may be and probably is the most profitable employment in which the inmates may be engaged. It also appears that the hay and fodder necessary for the keeping of the cows is raised on the farm, and taking everything into consideration it appears that the overseers of the poor are conservative in the exercise of their powers and authority.

Section 19, Chapter 33, of the Public Statutes is as follows:

"The profits and earnings arising from the work of persons committed to a workhouse or almshouse shall, with the stock remaining on hand, be disposed of as the overseers of the poor of the several places shall think proper,

either to the use of their cities or towns, of the persons committed or to the families of such persons."

The statutes assumes that profits may be made and certain earnings obtained from the work of the inmates, and the fact that the overseers have made and probably will make some profits speaks well of their ability in carrying on the business entrusted to them as overseers of the poor, and in so doing they are simply acting within the express provisions of the above quoted section.

Very truly yours,

FRANK L. WASHBURN,
City Solicitor.

The other matter was the removal of a woman, who had been aided by the city, to the Pratt farm. She was in need of aid but objected to staying at the farm. Through her friends she employed counsel to enter a writ of habeas corpus for her release from the farm, which was acted upon in the supreme court. The decision of the supreme court was that the woman was a pauper and that the overseers of the poor had acted within their authority, but that if her friends desired to remove her from the almshouse and take care of her they were at liberty to do so by furnishing the city of Melrose with suitable bonds agreeing so to do. This was done and the city has been relieved during the year of any expense for the care of this person.

The products of the farm for the year are as follows :

10½ tons of English hay.

3½ tons winter rye.

71 bushels potatoes.

18½ bushels beans.

3½ bushels white beans.

12 bushels beets.

62½ bushels carrots.

2 bushels onions.

1 bushel cucumbers.

3 bushels peas.

16 bushels tomatoes.

3 bushels yellow corn.
 64 bushels turnips.
 140 summer squash.
 54 winter squash.
 20 pumpkins.
 2 tons of fodder corn.
 40 boxes of strawberries.
 47 dozen of eggs.
 54 chickens.
 16,369 quarts of milk.

STOCK, TOOLS, AND FARMING IMPLEMENTS BELONGING TO
THE PRATT FARM.

2 horses.	2 iron rakes.
8 cows.	2 square shovels.
35 hens.	2 round point shovels.
56 chickens.	2 scythes.
1 cultivator.	2 sickles.
1 single plough.	1 corn knife.
1 double plough.	2 snathes.
1 harrow.	2 single harnesses.
1 drag rake.	1 pair chain traces.
1 wheelbarrow.	1 working harness.
4 hay rakes.	1 democrat wagon.
4 hoes.	1 express wagon.
1 shove hoe.	1 farm wagon.
2 manure forks.	1 sled.
3 pitch forks.	225 feet hose.
1 sledge hammer.	100 feet cow chain.
1 pick axe.	1 log chain.
1 iron crowbar.	2 ladders.
3 axes.	

FINANCIAL STATEMENT.

RECEIPTS AND REIMBURSEMENTS.

Appropriation,		\$9,000 00
Commonwealth of Mass., refund,	\$812 54	
Cities and towns, refund,	1,118 93	
Board of health, refund,	121 46	
Pratt farm, sale of produce,	863 20	
		3,333 87
		\$12,333 87

EXPENDITURES.

Outside Aid.

Food,	\$1,714 87	
Fuel,	740 21	
Rent,	1,022 33	
Board,	432 56	
Shoes,	278 15	
Clothing,	53 42	
Medicine,	101 50	
Medical aid,	395 40	
Burial,	63 00	
Cash,	127 50	
Care of insane,	2,892 10	
Baldwinsville Hospital for children,	169 45	
Cities and towns on our account,	589 90	
Office expenses, fares, etc.,	312 66	
		\$8,892 95
Pratt farm supplies,	\$2,358 28	
“ “ perm. repairs,	281 40	
“ “ live stock,	162 00	
		2,801 68
	\$11,694 63	
Balance to treasury,	639 24	
		12,333 87

PRATT FARM.

House expense, food,	\$577 01	
Fuel,	59 00	
Telephone,	24 58	
Supplies,	211 76	
House labor,	72 93	
Medicine,	34 05	
Medical aid,	35 00	
Repairs,	46 52	
Sundries,	52 30	
Salary of matron,	300 00	
		\$1,413 15
Farm expense, labor,	\$433 75	
Supplies,	511 38	
Live stock,	162 00	
Permanent repairs,	281 40	
		1,388 53
		\$2,801 68
Less for live stock,	\$162 00	
“ “ permanent repairs,	281 40	
Credit by sale of produce,	808 11	
“ “ wood delivered,	48 60	
“ “ milk delivered,	63 94	
		\$1,364 05
		\$1,437 63

Net cost of support per inmate, \$3.50 per week.

Amount paid for support at our almshouse, viz.:

Salaries,	\$300 00	
Supplies,	1,428 20	
Miscellaneous,	630 08	
Improvements at farm,	281 40	
Miscellaneous purposes,	162 00	
		\$2,801 68

Paid for full support at insane hospitals or asylums,	\$2,892 10
Paid for full support at other institutions,	169 45
Paid for full support in private families,	432 56

Amount paid for temporary relief and partial support (without regard to settlement or residence) viz.:

Cash allowances,	\$127 50
Rent,	1,022 33
Supplies,	2,786 65
Medical aid,	496 90
Miscellaneous,	63 00
	5,086 18

Paid for incidental expenses of overseers of the poor or agents,	312 66
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Total,	\$11,694 63
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Reimbursements of pauper expenses received during the year, viz.:

From almshouse, by sale of produce,	\$863 20
“ individuals for support in insane hospitals,	417 74
From state for relief,	812 54
“ cities and towns for relief,	1,240 39
	\$3,333 87
	\$8,360 76

Appropriation,	\$9,000 00
Net expenses,	8,360 76

Refunded to treasury,	\$639 24
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ELEANOR BROWN TOOTHAKER FUND.

Balance on hand to credit of the fund, Jan. 31, 1901,	\$1,582 11	
Interest to January 31, 1902,	123 16	
		\$1,705 27
Expenditures,		285 35
Balance,		\$1,419 92

Respectfully submitted,

SIDNEY H. BUTTRICK.

M. E. STANTIAL.

ALBERT B. FRANKLIN.

Soldiers' Relief, State and Military Aid Report.

May 1, 1902.

The Honorable Board of Aldermen, Melrose, Mass.:

GENTLEMEN:—I herewith respectfully submit my report as agent for the disbursement of soldiers' relief, state and military aid, under the direction of your committee for the year ending January 31, 1902.

SOLDIERS' RELIEF.

Aid has been given to twenty-eight families, amounting to	\$2,218 63
Less repaid by Commonwealth of Mass.,	168 00
	\$2,050 63
Cash,	\$491 37
Rent,	624 75
Clothing,	36 20
Amount carried forward,	\$1,152 32

Amount brought forward,	\$1,152 32
Medicine,	27 90
Medical aid,	118 00
Food,	546 53
Fuel,	279 66
Shoes,	56 40
Nursing,	18 00
Sundries,	19 82

\$2,218 63

Respectfully submitted,
SIDNEY H. BUTTRICK, Agent.

Report of the Cemetery Committee.

To the Honorable the Mayor and Board of Aldermen:

GENTLEMEN:—We submit herewith our report for the year ending January 31, 1902.

The expenses for the year have been as follows:

For labor as per pay rolls including

superintendent's salary,	\$3,991 00
Water pipes and fittings,	51 10
Repairing and sharpening tools,	20 40
Sods, loam and gravel,	97 32
Salaries of committee, 1900 and 1901,	150 00
Salaries of clerk, 1900 and 1901,	125 90
Printing, books, stamps, etc.,	104 77
Plants and shrubs,	67 22
Painting signs,	6 00
Dressing,	98 25
Carpenter work on tank, etc.,	27 03
Hardware and tools,	46 30
Grave markers and numbers,	63 99

Amount carried forward, \$4,849 28

Amount brought forward,	\$4,849 28
Grass seed,	28 16
Express and freight,	9 25
Drain pipe,	5 17
Cleaning monuments and hedstones,	30 00
Cement and lime,	50 70
Sundries,	16 77
	\$4,989 33
Receipts more than expenditures,	21 74
	\$5,011 07

Receipts as follows:

For and on account of:

Lots sold,	\$2,055 48
Care of lots,	1,520 84
Interments,	571 00
Single graves,	136 00
Foundations put in,	286 00
Labor,	227 00
Vaults,	110 00
Grave markers,	22 75
Use of tomb,	35 00
Dressing,	13 50
Wood sold,	23 00
Flowers,	10 50
	\$5,011 07
Total amount expended to Dec. 31, 1901, including original purchase of land, and also that of the Pratt farm,	\$82,441 60
Expended 1901,	4,989 33
	\$87,430 93

RECEIPTS.

From all sources to Dec. 31, 1900,	\$74,361 48
Received 1901,	5,011 07
	\$79,372 55

Under the superintendency of Mr. R. A. Leavitt a gradual but permanent improvement in the appearance of the cemetery goes on from year to year. Early in the season we found it necessary to issue rules and regulations for the better government of the property, in which we asked the co-operation of all proprietors in keeping the grounds in as beautiful and attractive condition as possible. This request has met with a cordial response. Looking forward a year or so, it is hoped that there may be completed three important improvements which will add wonderfully to the attractive appearance of the grounds, namely, the widening of Sylvan street easterly from the main entrance, the draining and grading of the swamp near the entrance, and the laying out of the entrances from the present cemetery to the Pratt farm, a part of which must necessarily soon be used for burials. It is thought that the widening of Sylvan street can be accomplished without the alteration of the present northerly boundary of the ground except at a point near the entrance and extending easterly something over one hundred and fifty feet. This will necessitate no change in existing lots as none are laid out immediately east of the entrance, but any other changes of existing boundaries should be carefully guarded against so to avoid disturbing existing lots and graves.

The improvement of the swamp has long been looked forward to, but lack of any appropriations by the city has rendered this work extremely slow as we are practically limited to our receipts each year. It is unfortunate that we can do such a small amount each season.

The entrances to the Pratt farm must however be laid out by a landscape gardener without delay, if we are to look forward to the future as we should, and to having the new part of the cemetery in accordance with modern ideas of the best equipped cemeteries in this vicinity.

JOHN P. DEERING,
OSCAR F. FROST,
L. HENRY KUNHARDT.

Cemetery Committee.

CITY CLERK'S REPORT.

MELROSE, MASS., May 12, 1902.

To the Honorable the Board of Aldermen:

GENTLEMEN: I have the honor to transmit herewith the annual report of the receipts of city clerk's department, the same being for the municipal year, ending January 31st, 1902, the payment of the same to the proper authorities, the vital statistics of the City of Melrose for 1901, with the assessed polls and voters.

Respectfully yours,

W. DEHAVEN JONES,

City Clerk.

FEES RECEIVED IN CITY CLERK'S DEPARTMENT, 1901, FOR
FINANCIAL YEAR, FEB. 1, 1901-JAN. 31, 1902.

Returning births, deaths and marriages,	\$206 30
Intention of marriages, 118 @ 50 cts.,	59 00
Releases, sales, etc., 32 @ 25 cts.,	8 00
Mortgages, 106 @ 75 cts.,	79 50
Hurdy gurdy licenses, 13 @ \$1 00	13 00
Musicians' " 3 " 1 00	3 00
Entertainments and dances, 26 @ \$1 00	26 00
Junk dealers', 5 @ \$10 00	50 00
" " 1 " 5 00	5 00
" " 3 " 2 50	7 50
Fireworks licenses, 11 @ \$2 00	22 00
Auctioneers' " 17 " 2 00	34 00
Express and jobbing licenses, 11 @ \$1 00	11 00
Amount carried forward,	\$524 30

Amount brought forward,	\$524 30	
Drivers' licenses, 9 @ \$1 00 .	9 00	
Carriage " 9 " 1 00 .	9 00	
Employment offices, 2 @ \$1 00 .	2 00	
		\$544 30
April 1, paid city treasurer, .	\$206 30	
June 5, " " " .	55 25	
July 3, " " " .	104 50	
Aug. 3, " " " .	41 50	
Sept. 10, " " " .	42 50	
Jan. 31, " " " .	94 25	
		\$544 30

DOG LICENSES.

W. DEHAVEN JONES, City Clerk, Melrose, in account with
MIDDLESEX COUNTY TREASURER.

477 male licenses @ \$2 00 each,	\$954 00	
43 female " " 5 00 "	215 00	
1 breeder's license, @ 25 00	25 00	
	\$1,194 90	
521 licenses less 20 cents each, .	104 20	
		\$1,089 80
June 3, by check to county treasurer,	\$459 20	
Dec. 3, " " " " " "	630 60	
		\$1,089 80

BIRTHS.

Whole number recorded in 1901, .		292
" " " " 1900, .	281	
Increase over last year, .	11	
Number of males born,	148	
" " females born,	144	
		292
Number of twin births,	3	

MARRIAGES.

Number of intentions filed . . .		117
Both parties residents of Melrose, . . .	57	
But one party a resident of Melrose, . . .	59	
Neither " " " " " . . .	1	
		117
Number of marriages recorded, . . .		129
Both parties residents of Melrose, . . .	59	
But one party a resident of Melrose, . . .	58	
Neither " " " " " . . .	12	
		129
First marriage of,	234	
Second " "	21	
Third " "	3	
		258
Age of oldest groom,	80	
" " youngest "	18	
" " oldest bride,	52	
" " youngest "	16	

DEATHS.

Number of deaths for 1901, . . .		186
" " " of males, . . .	84	
" " " females, . . .	102	
		186
Number of deaths of persons :		
Under 1 year of age, . . .	41	
From 1 to 5 years, . . .	8	
" 5 to 10 " . . .	4	
" 10 to 20 " . . .	5	
" 20 to 30 " . . .	7	
" 30 to 40 " . . .	14	
" 40 to 50 " . . .	16	
" 50 to 60 " . . .	13	
" 60 to 70 " . . .	28	
" 70 to 80 " . . .	24	
" 80 to 90 " . . .	22	
Over 90 years, . . .	4	
		186

Oldest male, 90 years, 5 months and 23 days.

Oldest female, 94 years, 9 months and 14 days.

Burial permits issued, 186

ASSESSED POLLS AND VOTERS.

	Polls.	Males.	Voted.	Females.	Voted.
Ward 1.....	464	387	290	15	3
Ward 2.....	581	396	251	58	3
Ward 3.....	527	384	286	26	3
Ward 4.....	429	336	201	74	2
Ward 5.....	483	312	202	56	1
Ward 6.....	648	445	328	41	0
Ward 7.....	580	348	259	50	0
Totals,	3,712	2,608	1,817	320	12

The following is a statement of the votes cast in the several wards of the city, November 5, 1901, for governor of the commonwealth.

Candidate and Party.	Wards.							Totals.
	1	2	3	4	5	6	7	
Michael T. Berry, Socialist Labor, ..	2	3	0	0	4	1	3	13
W. Murray Crane, Republican,	172	137	164	140	104	150	97	964
John B. Lewis, Jr., Prohibition, ...	6	11	2	2	2	5	0	28
Josiah Quincy, Democratic,	15	10	46	11	22	50	36	190
George H. Wrenn, Democratic Social,	2	1	1	0	2	4	3	13
Blanks,	0	1	4	2	2	5	3	17
Totals,	197	163	217	155	136	215	142	1,225

The following is a statement of the votes cast in the several wards of the city Dec. 10, 1901, for mayor, aldermen-at-large, school committee and ward aldermen.

Candidate and Party.	Wards.							Totals.
	1	2	3	4	5	6	7	
John Larrabee, Republican, M. L.								
N. papers,	229	213	226	162	174	268	199	1471
Scattering,	1	1	2	1	0	2	1	8
Blanks,	60	37	58	38	28	58	59	338
Totals,	290	251	286	201	202	328	259	1817

ALDERMEN-AT-LARGE.

Candidate and Party.	Wards.							Totals.
	1	2	3	4	5	6	7	
Charles J. Barton, M. L. N. paper,								
Citizens' Nomination paper, ...	141	113	152	112	119	177	179	993
George E. Berry, Nomination paper,	103	130	147	68	98	221	155	922
Clarence T. Fernald, R., M. L. N. P.	124	111	126	124	100	169	168	922
Arthur H. Folger, Republican,	192	151	139	102	96	134	121	935
Frank W. Foster, Republican,	119	95	158	89	90	106	72	729
Charles W. H. Frederick, R., M. L. N.								
paper,	70	85	101	126	83	100	53	618
Chester Shepard, C. N. P.	149	110	97	96	95	130	63	740
Blanks,	262	209	224	87	127	275	225	1409
Totals,	1160	1004	1144	804	808	1312	1036	7268

SCHOOL COMMITTEE, Three Years.

Candidate and Party.	Wards.							Totals.
	1	2	3	4	5	6	7	
Don E. Curtis, R., M. L. N. P.	229	195	212	170	158	230	151	1345
Sarah A. Day, R., M. L. N. P.	234	193	204	168	153	226	150	1328
William D. Stewart, R., M. L. N. P.	214	187	199	170	155	224	149	1298
Blanks,	202	187	252	95	143	304	327	1510
Totals,	879	762	867	603	609	984	777	5481

WARD ALDERMEN.

Candidate and Party.	Wards.							Totals.
	1	2	3	4	5	6	7	
Elmer W. Appleton, Ind. Nom. P. . .	87	...	...	...	...	...	...	...
William N. Folsom, R. C. Nom. P. .	159	...	...	...	...	...	...	...
Charles Elwell French, Republican,	165	...	...	...	...	...	...	...
Charles F. Reed, R. Ind. Nom. P. .	100	...	...	...	...	...	...	...
Blanks,	69	...	...	...	...	...	...	580
George E. Cornwall, Republican, ...	...	158	...	...	...	...	...	...
Albert A. Day, R., M. L. Nom. P. .	...	139	...	...	...	...	...	...
Oliver B. Munroe, M. L. N. P., I. N. P.	...	143	...	...	...	...	...	...
Blanks,	...	62	...	...	...	...	...	502

Candidate and Party.	Wards.							Totals.
	1	2	3	4	5	6	7	
Albert B. Franklin, C. N. P., M. L. N. P.....			152	...	...	...	...	...
Daniel E. Gibson, Republican,.....			172	...	...	...	...	...
Elbridge H. Goss, R., M. L. N.P.....			151	...	...	...	...	...
Blanks,			97	...	...	...	...	572
Moses S. Page, Republican,.....			150	...	...	...	...	...
John G. Robinson, R., M. L. N. P....			170	...	...	...	...	..
Blanks,			82	...	...	...	...	402
Fred E. Everett, Republican,.....			148	...	...	...	...	...
Edward S. Page, Republican,.....			131	...	...	...	...	...
Walter J. Skinner, R., Ind. Nom.P. ...			82	...	...	...	...	...
Blanks,			43	...	...	...	...	404
Stephen W. Harvey, R., Ind. Nom.P. ...			117	...	...	...	...	...
Aaron Hill, Jr., Republican,.....			203	...	...	...	...	...
Charles N. Shute, R., M. L. N.P.....			255	...	...	...	...	...
Blanks,			81	...	...	...	...	656
Andrew J. Burnett, Republican,.....			199	...	...	...	...	...
Charles W. Eaton, Ind. Nom. P.....			161	...	...	...	...	...
John E. Marshall, Republican,.....			102	...	...	...	...	...
Blanks,			56	...	...	...	...	518
Totals,.....	580	502	572	402	404	656	518	3634

LICENSE QUESTION.

	Wards.							Totals.
	1	2	3	4	5	6	7	
Yes,	25	31	53	23	24	63	73	292
No,	234	199	206	165	154	223	145	1,326
Blanks,	31	21	27	13	24	42	41	199
Totals,	290	251	286	201	202	328	259	1,817

TERMS OF OFFICE OF CITY CLERKS. (3 years)

	Wards.							Totals.
	1	2	3	4	5	6	7	
Yes,	90	123	111	107	95	137	81	744
No,	79	30	52	32	20	67	90	370
Blanks,	121	98	123	62	87	124	88	703
Totals,	290	251	286	201	202	328	259	1,817

Requests are frequently received for the vote of Melrose on the question of granting licenses for the sale of intoxicating

liquors, and in order that the figures may be generally available, it seems well to publish them.

LICENSE QUESTION.

TOWN.							Yes.	No.	Blanks.	Totals.
Year.										
1890	.	.	.	.	.	.	53	288	—	—
1891	.	.	.	.	.	.	134	613	219	966
1892	.	.	.	.	.	.	60	293	34	387
1893	.	.	.	.	.	.	233	742	146	1121
1894	.	.	.	.	.	.	247	902	193	1342
1895	.	.	.	.	.	.	220	729	146	1095
1896	.	.	.	.	.	.	261	995	234	1490
1897	.	.	.	.	.	.	341	1011	218	1590
1898	.	.	.	.	.	.	321	1163	207	1691
1899	.	.	.	.	.	.	283	1202	236	1721

CITY.										
1900	.	.	.	.	.	.	362	1581	205	2148
1901	.	.	.	.	.	.	292	1326	199	1817

In Memoriam.

JONATHAN COLLINS HOWES,

ALDERMAN-AT-LARGE.

Born in Chatham, Mass., January 6, 1837.

Died in Melrose, Mass., February 11, 1901.

CITY OF MELROSE, MAYOR'S OFFICE, February 11, 1901.

To the Honorable the Board of Aldermen, Melrose, Mass.:

GENTLEMEN: It becomes my duty to announce the death of a member of your honorable board, Mr. Jonathan C. Howes, which occurred at his home this morning. Recognizing his faithful and efficient services both as a city and town official, I have called you together that appropriate action may be taken by your honorable body.

Very truly yours,

JOHN LARRABEE,
Mayor.

The following action was taken by the Board:

Voted, That the mayor and members of the board, with the ex-mayor and the aldermen of the year 1900, attend the funeral services of our late member, Jonathan C. Howes. The following resolutions were adopted:

RESOLUTIONS ON THE DEATH OF JONATHAN C. HOWES.

WHEREAS, It is with feelings of profound sorrow that we realize that God, in his infinite wisdom, has summoned our late associate, Alderman Jonathan C. Howes to close his earthly career, and cross the river, therefore:

Resolved, That forty-five years of business and social relations caused him to be widely and favorably known; and his high charac-

ter, his long and honorable acquaintance and connection with the affairs of our town and city made him a wise counsellor, and insured him a foremost place in the confidence of his fellow citizens.

Resolved, That in our intercourses with him in official and friendly relations, from his constant courtesy and charm of manner, we came not only to have a high opinion of the sterling qualities of his character, but to admire him as a friend and as a man, and his genial and kindly presence was ever welcome.

Resolved, In the many offices of trust which he filled in town and city, he was ever faithful and diligent. His knowledge and judgment in matters was sound and reliable. He was outspoken and fearless for the right, honest of purpose, upright in action, pleasant in his social life, a kind husband, a faithful friend, an honest man. Such was Jonathan C. Howes.

Resolved, That from a sense of personal loss and as a token of our admiration and esteem, these resolutions be entered upon the records of the board of aldermen, as a tribute to his memory; and that an engrossed copy thereof be sent to the family of the deceased.

CHARLES J. BARTON,
ELBRIDGE H. GOSS,
GEORGE E. CORNWALL,
Committee on Resolutions.

SPECIAL ELECTION TO FILL VACANCY CAUSED BY THE DEATH
OF JONATHAN C. HOWES.

Order Number 989. Offered by Alderman Small. Be it ordered, That a special election for Aldermen-at-large to fill the vacancy caused by the death of Alderman Howes, by the voters of the whole city, be held on the second day of April next, the polls to be opened from six o'clock in the forenoon to sundown, that a warrant for that purpose be immediately issued.

Returns of the special election held April 2nd, 1901 submitted by the city clerk.

CITY CLERK'S OFFICE, April 15th, 1901.

To the Honorable Board of Aldermen:

GENTLEMEN:—I herewith submit the total tally sheet showing the number of votes cast for the various candidates at the special election held on April 2, 1901 for Alderman-

at-large to fill the vacancy, occasioned by the death of Jonathan C. Howes of Ward 4.

Respectfully yours,

W. DEHAVEN JONES,

City Clerk.

TOTAL VOTE.

Name.	Wards.							Totals.
	1	2	3	4	5	6	7	
Allen H. Bearse,.....	21	16	22	26	18	31	17	151
Charles W. H. Frederick,.....	67	48	80	111	31	76	35	448
George E. Berry,.....	60	48	99	32	50	152	89	530
Blanks,	1	2	3	1	1	4	1	13
	149	114	204	170	100	263	142	1142

Protest against the seating of George E. Berry filed by Charles J. Noyes, attorney for Charles W. H. Frederick, and petition for the seat vacated by Jonathan C. Howes presented by Charles J. Noyes, attorney for Charles W. H. Frederick.

Alderman Carrie presented the following motion: Voted, That a public hearing be given Monday, April 22, 1901, at 7.45 o'clock p. m., in the city auditorium. Yea, 16; nay, 4.

PUBLIC HEARING APRIL 22, 1901, CITY AUDITORIUM, CITY HALL.

Meeting called to order at 7.45 p. m. President John G. Robinson in the chair. Roll call showed twenty members present.

President Robinson read the returns of the special election held April 2, 1901 for the election of an alderman-at-large to fill the vacancy occasioned by the death of Alderman-at-large Jonathan C. Howes, from Ward 4, President Robinson also read a protest filed by Judge Charles J. Noyes against seating Mr. George E. Berry, who had received the largest number of votes at the special election, because he did not come from Ward 4, as required by the city charter. Judge Charles J. Noyes also filed a petition for the seat of Jonathan C. Howes, on behalf of Charles W. H. Frederick, he having received the largest number of votes of any candidate coming from Ward 4, as required by the city charter.

President Robinson then declared the hearing open and Judge Charles J. Noyes presented the case on behalf of Charles W. H. Frederick, George E. Berry presenting his own claim to the seat, having received the largest number of votes for the position at the special election. Both claimants or their attorney having spoken, that part of the hearing was closed at 9.45 o'clock p. m. Alderman Barton presented the following motion: "That the certificate be awarded to George E. Berry, he having received the largest number of votes." Alderman Barton addressed the board on his motion, and Aldermen Carrie, Small, Shepard and Marshall spoke in favor of Frederick. Alderman Small offered the following amendment: "That the name of Charles W. H. Frederick be substituted for the name of George E. Berry in the original motion." Alderman Barton called to the chair, and President Robinson addressed the board in favor of George E. Berry; Alderman Burnett moved the previous question. Alderman Carrie was called to the chair; voted to strike out that part of the motion where it says, "He having received the largest number of votes." On question of substituting the name of Charles W. H. Frederick for the name of George E. Berry in the original motion, roll call was ordered, resulting as follows: Yes, 13; No, 7. Amendment carried. President Carrie then stated the original motion as amended, "That the certificate of election be awarded to Charles W. H. Frederick as alderman-at-large to fill the vacancy in the board of aldermen occasioned by the death of Jonathan C. Howes." Roll call was ordered by the president, resulting as follows:

ROLL CALL.

Yes: Aldermen Carrie, Day, Eastman, Fernald, Foster, French, Goss, Hill, Marshall, Page, Shepard, Small. 12.

No: Aldermen Barton, Burnett, Cornwall, Everett, Folger, Moore, Robinson, Shute. 8.

The president declared Mr. Charles W. H. Frederick seated by a vote of 12 yea, to 8 nay.

LIST OF JURORS

IN THE

CITY OF MELROSE,

As prepared by the Board of Registrars of Voters,
January 14, 1902.

VICTOR C. KIRMES, Chairman,
HERBERT A. MARSH,
EDWIN L. CRAGIN,
W. DEHAVEN JONES, Clerk,
Board of Registrars of Voters.

Approved by Board of Aldermen, February 11, 1902.

Adams, Victor H., 67 Meridian street.....Clerk
Addison, John H., Ferdinand street.....Jeweller
Albee, Daniel C., 51 Malvern street.....Painter
Alberty, Frank R., 10 Brazil street.....Rubber Worker
Allen, Charles S., 83 Essex street.....Printer
Ames, Benjamin, 7 Gooch street.....Carpenter
Anderson, George P., 802 Main street.....Salesman
Appleton, Warren J., 46 North avenue.....Gilder
Atwood, George H., 59 Malvern street.....Manufacturer
Babb, Edward E., cor. E. Emerson and Orient avenue. Books
Babson, George E., 155 Porter street.....Electrician
Bailey, George A., 62 Summer street.....Newsdealer
Batchelder, H. A., 41 North avenue.....Clerk
Belyea, Frederick W., 51 Spear street.....Carpenter
Bent, Charles A., 89 Spear street.....Florist
Berry, William A., 110 Grove street.....Cook
Boerum, Harry H., 26 Hillside avenue.....Hotel Clerk
Bosworth, Louis H., 214 Franklin street.....Real Estate
Bowker, Joseph C., 25 Mount Vernon street.....Retired

Briry, William S., 62 Circuit street.....Druggist
 Bucknam, George C., 1071 Main street.....Poultry Dealer
 Burnett, Andrew J., Waverly avenue.....Plumber
 Caldwell, Edward M., 73 Florence street.....Agent
 Carr, George W., 220 Grove street.....Salesman
 Carter, William F., 51 Eliot street.....Carpenter
 Casey, Neil S., 93 Maple street.....Florist
 Cassell, James P., 104 Tremont street.....Butter and Eggs
 Chisam, Sanford A., 18 Eighth street.....Milk
 Clausen, William H., 115 Lebanon street.....Electrician
 Connell, Thomas, 40 Maple street.....Rubber Worker
 Cook, Orange H., 150 Green street.....Clerk
 Copeland, Albert F., 59 Beech Avenue.....Clerk
 Corson, Frederick U., 555 Lebanon street.....Carpenter
 Cragin, Simeon, 25 Union street.....Bookkeeper
 Crosby, Freeman M., 72 Trenton street.....Salesman
 Curran, Peter J., 56 Maple street.....Barber
 Currier, Arthur C., 535 Lebanon street.....Carpenter
 Curry, Robert H., 109 Highland avenue.....Plumber
 Dearborn, George H., 315 Main street.....Insurance
 Deering, Stephen C., 486 Lebanon street.....Lumber
 Dempsey, William R., 22 East street.....Shoes
 Dew, George W., 82 Lake avenue.....Painter
 Doherty, C. Francis, 22 Lynde street.....Barber
 Doherty, John T., 61 Tappan street.....Brass
 Doherty, Joseph J., 164 Grove street.....Wood Carver
 Dole, William H., 30 W. Emerson street.....Invigorator
 Duffy, William J., 152 Grove street.....Rubber Worker
 Dunton, Aubrey W., 43 Batchelder street.....Printer
 Eastman, Harry M., 478 Lebanon street.....Clerk
 Eaton, Charles W., 221 Grove street.....Towel Supply Co
 Ehlert, Herman F., 72 Pleasant street.....Foreman
 Fawcett, Winthrop S., 22 Greenwood street.....Salesman
 Fernald, Frank A., 37 East street.....Clerk
 Fernald, James H., 37 East street.....Carpenter
 Field, Charles M., 487 Lebanon street.....Machinist
 Fowler, Charles N., 17 Auburn street.....Window Shades
 Gibbons, Robert, 121 Trenton street.....Carpenter
 Gilman, John H., 268 E. Foster street.....Grocer

Gogin, Thomas M., 104 W. Emerson street.....Clerk
 Gordon, Curtis S., 21 Winthrop street.....Gypsy Moth
 Gordon, Harry S., 75 Baxter street.....Rubber Worker
 Grundy, Edmund L., 18 Cottage street.....Bookkeeper
 Grottendick, George B., 230 Grove street.....Bookbinder
 Hanley, Michael J., 101 Maple street.....Teamster
 Hayden, Arthur L., 42 W. Foster street.....Real Estate
 Henney, William T., 65 Grove street.....Painter
 Hitchins, J. Sidney, 69 Laurel street.....Leather
 Houdlette, Marcellus R., 260 Franklin street.Iron and Steel
 Howard, Frank G., 173 Porter street.....Clerk
 Hunnewell, Ervin C., 33 Meridian street.....Carpenter
 Hyde, George E., 57 Rowe street.....Rubber Worker
 Jefferson, Henry E., 27 Pine street.....Clerk
 Johnson, Rynard, 15 Baxter street.....Carpenter
 Jones, Marcello B., 190 Washington street.....Salesman
 Keating, John J., 40 Hurd street.....Gent's Furnishings
 Keefe, John, 36 Crescent avenue.....Rubber Worker
 Kitching, Edward J., 79 E. Emerson street.....Clerk
 Kohr, John, 466 Lebanon street.....Clerk
 Kunhardt, Lewis Henry, 89 Franklin street.....Surveyor
 Little, Arthur M., 157 Trenton street.....Clerk
 Lothrop, Ellsworth F., 139 Myrtle street.....Clerk
 Mahoney, Ross A., 108 Lynde street.....Rubber Worker
 Martin, Jr., James Lawrence, 145 Bellevue avenue....Clerk
 M'Coy, George M., 655 Main street.....Insurance
 McCullough, John J., 54 Summer street.....Foreman
 McFarlin, William J., 36 Cass street.....Variety Store
 Mendum, Ernest, 23 Garden street.....Publisher
 Morse, William A., 15 Auburn place.....Clerk
 Mullen, Thomas F., 4 Hurd street.....Salesman
 Murphy, David G., 106 Tremont street.....Gypsy Moth
 Mutty, Lewis J., 76 Meridian street.....Salesman
 Nickerson, Lemuel, 35 Irving street.....Sailmaker
 Osgood, Francis T., 121 East Foster street.....Clerk
 Palmer, Frank T., 146 Trenton street.....Painter
 Parker, Albon W., 181 Upham street.....Painter
 Peabody, Walter B., 31 Vinton street.....Merchant
 Pendleton, Clifton A., 179 Trenton street.....Clerk

Perry, John F., 26 West Hill avenue.....	Druggist
Philpot, Robert, 75 Dell avenue.....	Livery Stable
Pope, J. Frank, 95 Cedar park.....	Manufacturer
Pulley, James M., 33 Porter street.....	Cutter
Putnam, Frederick L., 280 Main street.....	Accountant
Queen, Thomas, 13 Mountain avenue.....	Contractor
Rich, Walter H., 66 Florence street.....	Trunks
Riley, James L., Howie street.....	Conductor
Robbins, Milo N., 277 W. Emerson street.....	Janitor
Robinson, Samuel B., 242 Tremont street.....	Hatter
Sanborn, George I., 123 First street.....	Merchant
Sawyer, Calvin W., 997 Main street.....	Insurance Agent
Seaver, Walter L., 289 Porter street.....	Clerk
Serra, Julius A., Warwick road.....	Barber
Shepard, Chester B., 28 Franklin street.....	Silversmith
Skinner, Walter J., 60 W. Wyoming avenue.....	Salesman
Simpson, Charles A., 120 Trenton street.....	Teas
Small, Edwin S., 273 Main street.....	Real Estate
Smith, Alden B., 126 Green street.....	Conductor
Smith, David, 70 Florence street.....	Retired
Smith, Warren F., 30 Baxter street.....	Mason
Somes, Rinaldo R., 271 Tremont street.....	Salesman
Stantial, Frank G., 52 Florence street.....	Superintendent
Stevens, George H., 70 Trenton street.....	Shoe Shanks
Stevens, George S., 25 Ashmont street.....	Bookkeeper
Turner, William, 454 Main street.....	Gate Tender
Twitchell, Union B., 30 Francis street.....	Furniture
Twombly, Albro J., 106 Ashland street.....	Stable
Upham, Frank R., 131 Grove street.....	Real Estate
Welch, Charles S., 290 Washington street.....	Fish
Wheeler, Charles O., 59 Elm street.....	Cutter
Whitcomb, Square L., 59 Sanford street.....	Gas
Wilson, Thomas, 362 Upham street.....	Painter
Wiswell, Dexter W., 181 Upham street.....	Painter
Woodman, George F., 24 Poplar street.....	Retired
Woodward, Clarence E., 141 Walton park.....	Salesman
Worth, Henry W., 138 Porter street.....	Farmer
Worthen, Chase C., 103 Youle street.....	Milk Dealer
Woodbury, Merton G., 14 E. Wyoming avenue...	Salesman

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